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                Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 08
                "Ask CAS" for self-help around the clock
NEWS 3 Apr 09
                BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09
                ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22
                BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9
        Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11
        Jun 10
                PCTFULL has been reloaded
NEWS 12
        Jul 02
                FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
                saved answer sets no longer valid
NEWS 14
        Jul 29
                Enhanced polymer searching in REGISTRY
        Jul 30 NETFIRST to be removed from STN
NEWS 15
NEWS 16 Aug 08
                CANCERLIT reload
NEWS 17
        Aug 08
                PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
        Aug 08 NTIS has been reloaded and enhanced
NEWS 19
        Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                now available on STN
NEWS 20
        Aug 19
                IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21
        Aug 19
                The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26
                Sequence searching in REGISTRY enhanced
NEWS 23
        Sep 03
                JAPIO has been reloaded and enhanced
        Sep 16
NEWS 24
                Experimental properties added to the REGISTRY file
NEWS 25
        Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 26 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27 Oct 21 EVENTLINE has been reloaded
NEWS 28 Oct 24 BEILSTEIN adds new search fields
NEWS 29 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25 More calculated properties added to REGISTRY
NEWS 33 Dec 02 TIBKAT will be removed from STN
NEWS 34 Dec 04 CSA files on STN
NEWS 35 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36 Dec 17 TOXCENTER enhanced with additional content
NEWS 37 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 38 Dec 30 ISMEC no longer available
NEWS 39 Jan 21 NUTRACEUT offering one free connect hour in February 2003
NEWS 40 Jan 21
                PHARMAML offering one free connect hour in February 2003
NEWS 41 Jan 29
                Simultaneous left and right truncation added to COMPENDEX,
                ENERGY, INSPEC
NEWS 42 Feb 13 CANCERLIT is no longer being updated
NEWS 43 Feb 24 METADEX enhancements
NEWS 44 Feb 24 PCTGEN now available on STN
NEWS 45 Feb 24
                TEMA now available on STN
NEWS 46 Feb 26 NTIS now allows simultaneous left and right truncation
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NEWS 47 Feb 26 PCTFULL now contains images

NEWS 48 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results

NEWS 49 Mar 19 APOLLIT offering free connect time in April 2003 NEWS 50 Mar 20 EVENTLINE will be removed from STN NEWS 51 Mar 24 PATDPAFULL now available on STN

NEWS 52 Mar 24 Additional information for trade-named substances without structures available in REGISTRY

NEWS 53 Mar 24 Indexing from 1957 to 1966 added to records in CA/CAPLUS

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,

CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),

AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

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FILE 'HOME' ENTERED AT 13:01:20 ON 03 APR 2003

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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2 APR 2003 HIGHEST RN 501410-52-2 STRUCTURE FILE UPDATES: DICTIONARY FILE UPDATES: 2 APR 2003 HIGHEST RN 501410-52-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

```
8 OXANDROLONE
=> d 18
L8 NOT FOUND
The L-number entered has not been defined in this session, or it
has been deleted. To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).
=> d 11 8
L1
     ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS
RN
     53-39-4 REGISTRY
CN
     Cyclopenta [5,6] naphtho [1,2-c] pyran-2(1H) -one, tetradecahydro-7-hydroxy-
     4a,6a,7-trimethyl-, (4aS,4bS,6aS,7S,9aS,9bR,11aS)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2-Oxa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-methyl- (7CI, 8CI)
CN
     2-Oxaandrostan-3-one, 17-hydroxy-17-methyl-, (5.alpha., 17.beta.)-
CN
OTHER NAMES:
     17-Methyl-2-oxa-5.alpha.-androstan-17.beta.-ol-3-one
     17.beta.-Hydroxy-17-methyl-2-oxa-5.alpha.-androstan-3-one
CN
     17.beta.-Hydroxy-17.alpha.-methyl-2-oxa-5.alpha.-androstan-3-one
     8075CB
CN
CN
    Anavar
CN
    Lonavar
CN
    NSC 67068
     Oxandren
CN
CN
     Oxandrin
CN
     Oxandrolone
CN
     Protivar
CN
     Provitar
CN
     SC 11585
CN
     Vasorome
FS
     STEREOSEARCH
MF
     C19 H30 O3
CI
     COM
LC
     STN Files:
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES,
       EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT,
       NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                     EINECS**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry.

=> s oxandrolone

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 230 REFERENCES IN FILE CA (1962 TO DATE)
- 10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 230 REFERENCES IN FILE CAPLUS (1962 TO DATE)
- 22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 6.30 6.51

FULL ESTIMATED COST

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FILE COVERS 1907 - 3 Apr 2003 VOL 138 ISS 14 FILE LAST UPDATED: 2 Apr 2003 (20030402/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11 L2 239 L1

=> d 12 200-239

- L2 ANSWER 200 OF 239 CAPLUS COPYRIGHT 2003 ACS
- AN 1970:473524 CAPLUS
- DN 73:73524
- TI Steroids and nephrectomy cardiopathy
- AU Gardell, Claude; Tuchweber, Beatriz; Hatakeyama, Shigeru; Kovacs, Kalman
- CS Inst. Med. Chirurg. Exptl., Univ. Montreal, Montreal, Can.
- SO Revue Canadienne de Biologie (1970), 29(2), 181-5 CODEN: RCBIAS; ISSN: 0035-0915
- DT Journal
- LA French
- L2 ANSWER 201 OF 239 CAPLUS COPYRIGHT 2003 ACS
- AN 1970:473474 CAPLUS
- DN 73:73474
- TI Protection by catatoxic steroids against dihydrotachysterol intoxication
- AU Selye, Hans; Yeghiayan, E.; Mandeville, Ruth
- CS Inst. Med. Chir. Exptl., Univ. Montreal, Montreal, Can.
- SO Atherosclerosis (Shannon, Ireland) (1970), 11(2), 321-31 CODEN: ATHSBL; ISSN: 0021-9150
- DT Journal
- LA English

```
ANSWER 202 OF 239 CAPLUS COPYRIGHT 2003 ACS
L2
AN
     1970:432951 CAPLUS
DN
     73:32951
     Steroid and dietary effects on blood lipids in elderly persons
ΤI
     Albanese, Anthony A.; Woodhull, Maurice L.; Orto, Louise A.; Zavattaro,
ΑU
     Dorothy N.; Wein, Evelyn H.
CS
     Nutr. and Metab. Res. Div., Burke Rehabil. Center, White Plains, NY, USA
SO
     Nutrition Reports International (1970), 1(4), 231-42
     CODEN: NURIBL; ISSN: 0029-6635
DT
     Journal
LΑ
     English
L2
     ANSWER 203 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1970:402358 CAPLUS
AN
DN
     73:2358
     Protection against methyprylone overdosage by catatoxic steroids
TΙ
ΑU
CS
     Inst. Med. Chir. Exp., Univ. Montreal, Montreal, Can.
     Canadian Anaesthetists' Society Journal (1970), 17(2), 107-11
SO
     CODEN: CANJAE; ISSN: 0008-2856
DT
     Journal
    English
LΑ
L2
    ANSWER 204 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1970:111706 CAPLUS
AN
     72:111706
DN
     2-Oxa-3-oxo steroids
TI
     Hara, Shoji
IN
PΑ
     Kowa Co., Ltd.
     Jpn. Tokkyo Koho, 3 pp.
     CODEN: JAXXAD
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     -----
                     ____
     JP 45005773
PΙ
                     B4
                           19700226
                                                            19640430
L2
    ANSWER 205 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
    1970:109306 CAPLUS
DN
     72:109306
ΤI
     Prevention of nicotine intoxication by catatoxic steroids
ΑU
     Selye, Hans; Yeghiayan, E.; Mecs, Irene
CS
     Inst. Exp. Med. Surg., Univ. Montreal, Montreal, Can.
SO
    Archives Internationales de Pharmacodynamie et de Therapie (1970), 183(2),
     235-8
     CODEN: AIPTAK; ISSN: 0003-9780
DT
     Journal
LA
    English
    ANSWER 206 OF 239 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1970:75235 CAPLUS
DN
    72:75235
ΤI
     Comparative androgenic, myotrophic, and antigonadotrophic properties of
     some anabolic steroids
    Boris, Alfred; Stevenson, Richard H.; Trmal, Thelma
ΑU
    Res. Div., Hoffmann-La Roche Inc., Nutley, NJ, USA
CS
SO
    Steroids (1970), 15(1), 61-71
    CODEN: STEDAM; ISSN: 0039-128X
DT
    Journal
```

LΑ

English

```
L2
     ANSWER 207 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1970:18865 CAPLUS
DN
     72:18865
ΤI
     Estrogenic and antiestrogenic activities of a number of steroids in
     behavioral estrus and vaginal smear assays in the ewe
     Lindsay, D. R.; Scaramuzzi, R. J.
ΑU
     Univ. Sydney, Sydney, Australia
CS
SO
     Journal of Endocrinology (1969), 45(4), 549-55
     CODEN: JOENAK; ISSN: 0022-0795
DT
     Journal
LA
     English
L2
     ANSWER 208 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1969:520149 CAPLUS
AN
     71:120149
DN
ΤI
     Prevention of digitoxin poisoning by various steroids
ΑU
     Selye, Hans; Jelinek, Jan; Krajny, Miloslav
CS
     Inst. Exp. Med. Surg., Univ. Montreal, Montreal, Can.
SO
     Journal of Pharmaceutical Sciences (1969), 58(9), 1055-9
     CODEN: JPMSAE; ISSN: 0022-3549
DT
     Journal
     English
LΑ
T.2
     ANSWER 209 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1969:93684 CAPLUS
AN
DN
     70:93684
TI
     Nutritional and metabolic effects of anabolic steroids and corticosteroids
ΑU
     Albanese, Anthony A.
CS
     Nutr. and Metab. Res. Div., Burke Rehabil. Center, White Plains, NY, USA
     Journal of the American Medical Women's Association (1969), 24(1), 42-51
     CODEN: JAMWAN; ISSN: 0091-7427
     Journal
DT
LΑ
     English
L2
     ANSWER 210 OF 239 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1969:36402 CAPLUS
DN
     70:36402
TI
     Proper choice of agents to diminish hypercalciuria in urolithiasis
ΑU
     Gursel, Erol; Zinsser, Hans H.
CS
     Coll. of Phys. and Surg., Columbia Univ., New York, NY, USA
     Medical Times (1968), 96(11), 1133-48
SO
     CODEN: METIA9; ISSN: 0092-7309
DТ
     Journal
     English
LΑ
L2
     ANSWER 211 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1969:614 CAPLUS
AN
DN
     70:614
     Uterotropic activities of some androgenic steroids in the immature mouse
TI
ΑU
     Boris, Alfred; Trmal, Thelma
     Res. Div., Hoffmann-La Roche, Inc., Nutley, NJ, USA
CS
SO
     Journal Europeen des Steroides (1967), 2(6), 539-45
     CODEN: JEPSBL; ISSN: 0531-4186
DT
     Journal
LA
     English
L2
     ANSWER 212 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1968:493395 CAPLUS
ΑN
```

Anticatabolic applications of newer anabolic steroids

DN

ΤI

ΑU

69:93395

Albanese, Anthony A.

- Burke Rehabilitation Center, White Plains, NY, USA CS
- Medical Times (1968), 96(9), 871-81 CODEN: METIA9; ISSN: 0092-7309
- DTJournal
- English LΑ
- L2 ANSWER 213 OF 239 CAPLUS COPYRIGHT 2003 ACS
- 1968:483810 CAPLUS AN
- DN 69:83810
- ΤI Influence of various compounds, particularly steroids, on a transplantable rat mammary fibroadenoma and a transplantable mouse mammary adenocarcinoma
- ΑU Rooks, Wendell H., II; Baba, Shozo; Abe, Osahiko; Harada, Tanekazu; Dorfman, Ralph I.
- Inst. of Hormone Biol., Syntex Res. Center, Palo Alto, CA, USA CS
- SO Curr. Conc. Breast Cancer, Proc. Symp., New Orleans (1967), Meeting Date 1966, 63-79. Editor(s): Segaloff, Albert. Publisher: Williams and Wilkins Co., Baltimore, Md. CODEN: 20AFAF
- DT Conference
- LA English
- T.2 ANSWER 214 OF 239 CAPLUS COPYRIGHT 2003 ACS
- AN1968:474303 CAPLUS
- DN 69:74303
- TIOxandrolone effect on growth and bone age in idiopathic growth failure
- ΑU Geller, Jack
- CS Albert Einstein Coll. of Med., Yeshiva Univ., Bronx, NY, USA
- Acta Endocrinologica (1968), 59(2), 307-16 SO CODEN: ACENA7; ISSN: 0001-5598
- DTJournal
- LΑ English
- L2 ANSWER 215 OF 239 CAPLUS COPYRIGHT 2003 ACS
- 1968:408707 CAPLUS AN
- DN 69:8707
- TI Effect of oxandrolone on plasma lipids and lipoproteins of patients with disorders of lipid metabolism
- ΑU Sachs, Bernard A.; Wolfman, Lila
- CS Med. Div., Montefiore Hosp., Bronx, NY, USA
- SO Metabolism, Clinical and Experimental (1968), 17(5), 400-10 CODEN: METAAJ; ISSN: 0026-0495
- DT Journal
- English LA
- 1.2 ANSWER 216 OF 239 CAPLUS COPYRIGHT 2003 ACS
- 1968:570 CAPLUS AN
- DN 68:570
- ΤI Effect of anabolic steroids on plasma glycoproteins
- Sachs, Bernard A.; Wolfman, Lila ΑU
- CS Montefiore Hosp. and Med. Center, New York, NY, USA
- SO Nature (London, United Kingdom) (1967), 216(5112), 297-8 CODEN: NATUAS; ISSN: 0028-0836
- DTJournal
- LΑ English
- ANSWER 217 OF 239 CAPLUS COPYRIGHT 2003 ACS L2
- 1967:505680 CAPLUS ΑN
- DN 67:105680
- ΤI Effects of anabolic steroids in chronic renal failure. I. Short-term effects
- ΑU Sigler, Miles H.; Issekutz, Bela, Jr.
- CS Lankenau Hosp., Philadelphia, PA, USA

```
Archives of Internal Medicine (1967), 120(4), 408-16
SO
     CODEN: AIMDAP; ISSN: 0003-9926
DT
     Journal
LА
     English
     ANSWER 218 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1967:112657 CAPLUS
DN
     66:112657
ΤI
     Relative androgenic activities of some anabolic steroids as measured by
     chick-comb responses
ΑU
     Boris, Alfred; Ng, Chuck
     Res. Div., Hoffmann-La Roche, Inc., Nutley, NJ, USA
ÇS
     Steroids (1967), 9(3), 299-305
SO
     CODEN: STEDAM; ISSN: 0039-128X
DT
     Journal
LΑ
     English
     ANSWER 219 OF 239 CAPLUS COPYRIGHT 2003 ACS
L2
ΑN
    1967:11123 CAPLUS
DN
     66:11123
TI
    (Optionally 17-alkylated)-17-oxygenated-3-oxa-5.alpha.-androstan-2-ones
     and intermediates thereto
     Pappo, Raphael; Scaros, Mike G.
IN
     Searle, G. D., and Co.
PΑ
SO
     U.S., 3 pp.
     CODEN: USXXAM
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
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                                         -----
PΙ
    US 3282962
                           19661101
                                          US
                                                          19641221
L2
    ANSWER 220 OF 239 CAPLUS COPYRIGHT 2003 ACS
    1966:450161 CAPLUS
AN
     65:50161
DN
OREF 65:9411f-h,9412a
    Modification of embryonic development of reproductive and lymphoid organs
     in the chick
ΑU
     Erickson, Alan E.; Pincus, Gregory
CS
    Worcester Found. Exptl. Biol., Shrewsbury, MA
SO
     J. Embryol. Exptl. Morphol. (1966), 16(1), 211-29
ĎΤ
     Journal
LΑ
    English
L2
    ANSWER 221 OF 239 CAPLUS COPYRIGHT 2003 ACS
    1966:449474 CAPLUS
ΑN
     65:49474
DN
OREF 65:9295e-f
    Potent inhibitors of glycine-2-14C uptake in the rat mammary fibroadenoma
ΤI
    Rooks, W. H., II; Harada, T.; Baba, S.; Dorfman, R. I.
ΑU
CS
    Worcester Found. for Exptl. Biol., Shrewsbury, MA
SO
    Oncologia (1966), 20(1), 8-10
DT
    Journal
LΑ
    English
L2
    ANSWER 222 OF 239 CAPLUS COPYRIGHT 2003 ACS
    1966:440387 CAPLUS
ΑN
    65:40387
DN
OREF 65:7576b-e
    Effects of androgens, estrogens, and corticoids on strontium kinetics in
TI
```

```
ΑU
     Eisenberg, Eugene
CS
     Univ. of California, San Francisco
SO
     J. Clin. Endocrinol. Metab. (1966), 26(5), 566-72
DT
     Journal
     English
LΑ
     ANSWER 223 OF 239 CAPLUS COPYRIGHT 2003 ACS
L2
     1966:37461 CAPLUS
AN
     64:37461
DN
OREF 64:7001g-h
     Relative effects of 17.alpha.-alkylated anabolic steroids on
     sulfobromophthalein (BSP) retention in rabbits
ΑU
     Lennon, Harry D.
CS
     G. D. Searle & Co., Chicago
     J. Pharmacol. Exptl.. Therap. (1966), 151(1), 143-50
SO
DТ
     Journal
LΑ
    English
L2
     ANSWER 224 OF 239 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1966:21046 CAPLUS
DN
     64:21046
OREF 64:3925d-f
     Studies of anabolic steroids. III. The effect of oxandrolone on height and
     skeletal maturation in mongoloid children
ΑU
     George Ray, C.; Kirschvink, Joseph F.; Waxman, Sorrell H.; Kelly, Vincent
CS
     Univ. of Washington, Seattle
     Am. J. Diseases Children (1963), 106, 368-74,375
SO
DT
     Journal
LA
     Unavailable
L2
     ANSWER 225 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1966:21045 CAPLUS
DN
     64:21045
OREF 64:3925d-f
     Studies of anabolic steroids. III. The effect of oxandrolone on height and
TТ
     skeletal maturation in mongoloid children
ΑIJ
     George Ray, C.; Kirschvink, Joseph F.; Waxman, Sorrell H.; Kelly, Vincent
     C.
CS
     Univ. of Washington, Seattle
SO
    Am. J. Diseases Children (1965), 110(6), 618-23
DT
     Journal
LΑ
    English
L2
    ANSWER 226 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
    1965:464820 CAPLUS
DN
     63:64820
OREF 63:11953d-f
ΤI
    Methyltestosterone, related steroids, and liver function
ΑU
     DeLorimier, Alfred A.; Gordan, Gilbert S.; Lowe, Rolland C.; Carbone, John
CS
    Univ. of California Med. Center, San Francisco
    Arch. Intern. Med. (1965), 116(2), 289-94
SO
DT
     Journal
LA
    English
    ANSWER 227 OF 239 CAPLUS COPYRIGHT 2003 ACS
    1965:456169 CAPLUS
ΑN
     63:56169
DN
OREF 63:10288d-e
    Protection by various anabolic steroids against dihydrotachysterol induced
     calcinosis and catabolism
```

```
ΑU
     Selye, Hans; Tuchweber, Beatriz; Jacqmin, Marc
CS
     Univ. Montreal, Can.
SO
     Acta Endocrinol. (1965), 49(4), 589-602
DT
     Journal
LA
     English
L2
     ANSWER 228 OF 239 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1965:447612 CAPLUS
     63:47612
DN
OREF 63:8685c-e
TI
     Oxandrolone therapy of growth retardation
     Danowski, T. S.; Lee, F. A.; Cohn, R. E.; D'Ambrosia, R. D.; Limaye, N. R.
ΑU
CS
     Univ. of Pittsburgh, Pittsburgh, PA
SO
     Am. J. Diseases Children (1965), 109(6), 526-32
DT
     Journal
     English
LA
L2
     ANSWER 229 OF 239 CAPLUS COPYRIGHT 2003 ACS
     1965:425638 CAPLUS
ΑN
     63:25638
DN
OREF 63:4618b-c
     Study of calcium metabolism during diffuse disseminated osteopathies with
     47Ca. A comparative study of the effect of three anabolic steroids
ΑU
     Delaloye, B.; Tabau, R.
     Univ. Lausanne, Switz.
CS
     Schweiz. Med. Wochschr. (1964), 94(40), 1410-17
SO
DT
     Journal
LA
     French
L2
     ANSWER 230 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1965:75874 CAPLUS
DN
     62:75874
OREF 62:13472g-h,13473a
     Effect of several anabolic steroids on sulfobromophthalein (BSP) retention
TI
     in rabbits
ΑU
     Lennon, Harry D.
SO
     Steroids (1965), 5(3), 361-73
DT
     Journal
LA
     English
L2
     ANSWER 231 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1965:51909 CAPLUS
     62:51909
DN
OREF 62:9200f-h,9201a
     Jervine. XIV. Isojervin-11.beta.-ol and related reduction products of
     isojervine
ΑU
     Wintersteiner, O.; Moore, M.
CS
     Squibb Inst. for Med. Res., New Brunswick, NJ
SO
     J. Org. Chem. (1965), 30(2), 528-33
     CODEN: JOCEAH; ISSN: 0022-3263
DT
     Journal
     English
LΑ
     ANSWER 232 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1965:45397 CAPLUS
     62:45397
DN
OREF 62:8094a-b
     A quantitative expression for nitrogen retention with anabolic steroids.
     IV. Oxandrolone
AU
     Metcalf, William; Blumberg, Harold; Roach, John
CS
     Albert Einstein Coll. of Med., New York, NY
SO
    Metab., Clin. Exptl. (1965), 14(1), 59-66
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DT
    Journal
    English
LΑ
L2
   ANSWER 233 OF 239 CAPLUS COPYRIGHT 2003 ACS
   1965:23704 CAPLUS
AN
DN 62:23704
OREF 62:4295d-f
   Anabolic activity of 2-oxa-17.alpha.-methyldihydrotestosterone
    (Oxandrolone) in castrated rats
ΑU
    Lennon, Harry D.; Saunders, Francis J.
CS
    G. D. Searle & Co., Chicago
SO
    Steroids (1964), 4(5), 689-97
DT
    Journal
LA English
L2 ANSWER 234 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN 1965:9300 CAPLUS
DN 62:9300
OREF 62:1717f-h,1718a-e
   17.alpha.-Alkylated 17.beta.-(substituted-oxy)-2-oxa-5.alpha.-androstan-3-
IN Pappo, Raphael
PA G.D. Searle & Co.
SO 5 pp.
DT
   Patent
LA Unavailable
FAN.CNT 1
                              APPLICATION NO. DATE
    PATENT NO. KIND DATE
    -----
                                                     -----
   US 3155684
                         19641103
                                     US
                                                      19621029
    GB 988655
                                      GB
L2
   ANSWER 235 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN 1964:484501 CAPLUS
DN 61:84501
OREF 61:14750c-h
TI 2-0xa-3-oxosteroids
IN Pappo, Raphael
PA G. D. Searle & Co.
SO 5 pp.
DT Patent
LA Unavailable
   PATENT NO. KIND DATE
                                     APPLICATION NO. DATE
    ______
                                      -----
PI DE 1171425
                         19640604
                                      DE
PRAI US
                         19600517
L2
    ANSWER 236 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
    1964:418478 CAPLUS
DN
   61:18478
OREF 61:3170e-h,3171a-d
ΤI
   17-Oxygenated oxa steroids
IN
    Pappo, Raphael
PA G. D. Searle & Co.
SO
    11 pp.
DT
    Patent
   Unavailable
    PATENT NO. KIND DATE
                                    APPLICATION NO. DATE
PI US 3128283
                        19640407
                                      US
PRAI MX
                         19610510
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ANSWER 237 OF 239 CAPLUS COPYRIGHT 2003 ACS
L2
    1963:475550 CAPLUS
AN
    59:75550
DN
OREF 59:14067e-g
    17.beta.-Hydroxy-17.alpha.-methyl,2-oxa-3-oxo-5.alpha.-androstane
    Pappo, Raphael
   G. D. Searle & Co.
PA
    13 pp.
SO
    Patent
DT
LA Unavailable
    PATENT NO.
                   KIND DATE
                                       APPLICATION NO. DATE
                    ----
    FR M1697
                          19630318
PΙ
                                       FR
    GB 968206
                                        GB
PRAI US
                          19600517
L2
   ANSWER 238 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
   1963:4327 CAPLUS
DN
    58:4327
OREF 58:724g-h,725a
    Oxandrolone; a potent anabolic steroid of novel chemical configuration
    Fox, Maurice; Minot, Ann S.; Liddle, Grant W.
ΑU
    Vanderbilt Univ., Nashville, TN
CS
SO
    J. Clin. Endocrinol. Metab. (1962), 22, 921-4
DT
    Journal
LA
    Unavailable
L2
    ANSWER 239 OF 239 CAPLUS COPYRIGHT 2003 ACS
    1962:449501 CAPLUS
AN
DN 57:49501
OREF 57:9913f-i,9914a-h
TI 2 Oxasteroids. New class of biologically active compounds
AU
    Pappo, Raphael; Jung, Christopher J.
CS
    G. D. Searle & Co., Skokie, IL
SO
    Tetrahedron Letters (1962) 365-71
DT
    Journal
    Unavailable
LA
=> d 12 236-239 all
L2
    ANSWER 236 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
    1964:418478 CAPLUS
DN
    61:18478
OREF 61:3170e-h,3171a-d
   17-Oxygenated oxa steroids
TI
IN Pappo, Raphael
PA G. D. Searle & Co.
    11 pp.
SO
DT
    Patent
LA
    Unavailable
NCL 260343200
    42 (Steroids)
    PATENT NO.
                    KIND DATE APPLICATION NO. DATE
                    ---- -----
                                       ______
PΙ
    US 3128283
                          19640407
                                       US
PRAI MX
                          19610510
    The title compds. were anabolic agents. 17.beta.-Hydroxy-5.alpha.-estran-
    3-one 2.45, Ac2O 2.2, and C5H5N 20 parts left 16 hrs. at room temp. gave
    17.beta.-acetoxy-5.alpha.-estran-3-one (I), m. 104-6.degree.. I 8 in AcOH
    63 treated with 2N Br in AcOH 25 parts and stirred 15 min. gave
    17.beta.-acetoxy-2-bromo-5.alpha.-estran-3-one (II). II refluxed 15 min.
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with collidine gave 17.beta.-acetoxy-5.alpha.-estr-1-en-3-one (III), m. 133.5-5.5.degree., sapond. to 17.beta.-hydroxy-5.alpha.-estr-1-en-3-one. Similarly, 17.beta.-hydroxy-17.alpha.-methyl-5.alpha.-estran-3-one treated with Br and p-MeC6H4SO3H in HCONMe2 gave 2-bromo-17.beta.-hydroxy-17.alpha.-methyl-5.alpha.-estran3-one, which was refluxed 6 hrs. with Li2CO3 and LiCl in HCONMe2 to give 17.beta.-hydroxy-17.alpha.-methyl-5.alpha.-estr-1-en-3-one, m. 141-2.5.degree., [.alpha.]D 87.degree. (CHCl3). Similarly, 17.alpha.-ethyl-17.beta.-hydroxy-5.alpha.-estran-3one was converted into the 2-bromo compd., and then treated with Li2CO3 and LiCl to give 17.alpha.-ethyl-17.beta.-hydroxy-5.alpha.-estr-1-en-3one, m. 170-3.degree., [.alpha.]D 42.4.degree.. 5.alpha.-Androst-1-ene-3,17-dione 8 in AcOH 120 and H2O 15 stirred 4 hrs. at room temp. with Pb(OAc)4 50 and OsO4 0.75 part, then 16 hrs. at room temp. gave 1,17-dioxo-1,2-seco-A-norandrostan-2-oic acid (IV). IV reduced at room temp. with NaBH4 in alk. soln. gave 17.beta.-hydroxy-2-oxa-5.alpha.androstan-3-one (V), m. 198-203.degree.. 17.beta.-Hydroxy-17.alpha.methyl-5.alpha.-androst-1-en-3-one 63.6 in AcOH 95 and H2O 12 stored 24 hrs. at room temp. with Pb(OAc)4 40 and OsO4 0.6 part gave 17.beta.-hydroxy-17.alpha.-methyl-1-oxo-1,2-seco-Anor-5.alpha.-androstan-2oic acid (VI), m. 166-73.degree. (decompn.). VI similarly reduced with alk. NaBH4 gave 17.beta.-hydroxy-17.alpha.-methyl-2-oxa-5.alpha.-androstan-3-one, m. 235-8.degree., [.alpha.]D -23.degree. (CHCl3). Similarly, 17.alpha.-ethyl-17.beta.-hydroxy-5.alpha.-androst-1-en-3-one gave 17.alpha.-ethyl-17.beta.-hydroxy-1-oxo-1,2-seco-A-nor-5.alpha.-androstan-2oic acid and 17.alpha.-ethyl-17.beta.-hydroxy-2-oxa-5.alpha.-androstan-3one, m. 192-5.degree.. V 3 in Me2CO 40 parts treated with 8N CrO3 in 8N H2SO4 gave 2-oxa-5.alpha.-androstane-3,17-dione, m. 173-4.degree.. 1,4-Androstadiene-3,17-dione 50 in tert-BuOH 546 and H2O 700 left 15 days at room temp. with KClO4 9 and OsO4 4.5 parts gave 4,5-dihydroxy-1and rostene-3,17-dione (VII), m. 203-8.degree. and 1,2-dihydroxy-4androstene-3,17-dione (VIII), m. 206-10.degree.. A mixt. of VII and VIII in AcOH and H2O treated 1.75 hrs. at 50-60.degree. with Pb(OAc)4 gave 1,17-dioxo-1,2-seco-A-norandrost-3-en-2-oic acid (IX), m. 245-53.degree.. IX 4.75 in CHCl3 12 treated 4 hrs. at room temp. with NaBH4 5 in H2O 60 parts gave 17.beta.-hydroxy-2-oxa-4-androsten-3-one (X), m. 205-7.degree.. 17.beta.-Hydroxy-17.alpha.-methyl-1,4-androstadien-3-one 50 in tert-BuOH 546 and H2O 700 treated 7 days at room temp. with OsO4 4.25 and KClO4 8.5 parts gave 4,5,17.beta.-trihydroxy-17.alpha.-methyl-1-androsten-3-one (XI), m. 199-201.degree., and 1,2,17.beta.-trihydroxy-17.alpha.-methyl-4androsten-3-one (XII), m. 193-5.5.degree.. A mixt. of XI and XII treated as above with Pb(OAc)4 gave 17.beta.-hydroxy-17.alpha.-methyl-1-oxo-1,2seco-A-nor-3-androsten-2-oic acid (XIII), m. 250-65.degree.. XIII in CHCl3 reduced with alk. NaBH4 gave 17.beta.-hydroxy-17.alpha.-methyl-2-oxa-4-androsten-3-one, m. 230-40.degree. (decompn.). 17.alpha.-Ethyl-17.beta.hydroxy-1,4-androstadien-3-one similarly gave 17.alpha.-ethyl-17.beta.hydroxy-1-oxo-1,2-seco-A-nor-3-androsten-2-oic acid, and then 17.alpha.-ethyl-17.beta.-hydroxy-2-oxa-4-androsten-3-one. X 1 in Me2CO 16 parts treated 5 min. at room temp. with 8N CrO2 and 8N H2SO4 gave 2-oxa-4-androstene-3,17-dione, m. 178-83.degree.. 17.beta.-Hydroxy-17.alpha.-methyl-5.alpha.-androstan-3-one 2.5, isopropenyl acetate 25, and concd. H2SO4 0.2 part distd. slowly in 3 hrs. gave 17.alpha.-methyl-5.alpha.-androst-2-ene-3,17.beta.-diol 3,17.beta.-diacetate (XIV). XIV in EtOAc ozonized at -70.degree., the product reduced with NaBH4, and the org. layer sepd. and acidified gave a crude product (XV). XV heated 7 hrs. with NaOH and H2O gave 2,17.beta.-dihydroxy-17.alpha.-methyl-2,3-seco-5.alpha.-androstan-3-oic acid (XVI), m. 214-15.degree.. XVI in tert-BuPh slowly distd. in 3 hrs. gave 17.beta.-hydroxy- 17.alpha.-methyl-3-oxa-Ahomo-5.alpha.-androstan-4-one, m. 241-5.degree.. 2.alpha., 17.beta.-Dihydroxy-17.alpha.-methyl-4-androsten-3-one 1, HIO4 0.8, and C5H5N 10 in H2O 8 parts stored 24 hrs. at room temp. gave 17.beta.-hydroxy-17.alpha.methyl-2-oxo-2,3-seco-4-androsten-3-oic acid (XVII), m. 219-23.degree. (decompn.). XVII reduced with NaBH4 gave 2,17.beta.-dihydroxy-17.alpha.-

```
methyl-2,3-seco-4-androsten-3-oic acid (XVIII), m. 182-4.degree.. XVIII
refluxed 15 min. in C6H6 gave 17.beta.-hydroxy-17.alpha.-methyl-3-oxa-A-
homo-4-androsten-4-one, m. 182-4.degree.. 17.beta.-Hydroxy-
2.alpha.,17.alpha.-dimethyl-5.alpha.-androstan-3-one in CH2Cl2 stored 4
days at room temp. with NaOAc and 40% AcO2H in AcOH gave
17.beta.-hydroxy-2.alpha.,17.alpha.-dimethyl-3-oxa-A-homo-5.alpha.-
androstan-4-one (XIX), m. 214-30.degree.. XIX 1 in MeOH 16 heated 5 min. with 5% NaOH in H2O 30 parts gave 2.beta.,17.beta.-dihydroxy-
2.alpha., 17.alpha.-dimethyl-2, 3-seco-5.alpha.-androstan-3-oic acid, m.
190.degree.. VI in tetrahydrofuran treated with MeMgBr gave
17.beta.-hydroxy-1.beta.,17.alpha.-dimethyl-2-oxa-5.alpha.-androstan-3-
one, m. 190-201.degree. and 17.beta.-methyl-1.alpha.,17.alpha.-dimethyl-2-
oxa-5.alpha.-androstan-3-one, m. 200-5.degree.. Various other related
compds. were similarly prepd.
Spectra, infrared
Spectra, visible and ultraviolet
   (of 2-oxasteroids and precursors)
1H-Benz[e]indene-7-acetic acid, dodecahydro-3-hydroxy-6(2-hydroxypropyl)-
   3,3a,6-trimethyl-, .epsilon.-lactone
1H-Benz[e]indene-7-acetic acid, dodecahydro-3-hydroxy-6-(2-hydroxyethyl)-
   3,3a,6-trimethyl-, .epsilon.-lactone
2,3-Seco-5.alpha.-androstan-3-oic acid, 2.beta.,17.beta.-dihydroxy-2,17-
   dimethyl-
2-Oxasteroids
3-0xa-A-homo-5.alpha.-androstan-4-one, 17.beta.-hydroxy-17-methyl-
3-Oxa-A-homo-5.alpha.-androstan-4-one, 17.beta.-hydroxy-2.alpha.,17-
   dimethyl-
3-Oxa-A-homoandrost-4a-en-4-one, 17.beta.-hydroxy-17-methyl-
7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid, 1,2,3,3a,4,5,5a,6,8,9,9a,9b-
   dodecahydro-3-hydroxy-6-(2-hydroxyethyl)-3,3a,6-trimethyl-,
   .epsilon.-lactone
53-39-4, 2-Oxa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-
          794-12-7, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-
798-33-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-1.alpha.,17-
            901-87-1, 1,2-Seco-A-nor-5.alpha.-androstan-2-oic acid,
17.beta.-hydroxy-17-methyl-1-oxo-
                                     901-88-2, 2-0xa-5.alpha.-androstan-3-
one, 17.beta.-hydroxy-1.beta.,17-dimethyl-
                                             903-69-5,
2,3-Secoandrost-4-en-3-oic acid, 2,17.beta.-dihydroxy-17-methyl-
903-69-5, 7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid,
1,2,3,3a,4,5,5a,6,8,9,9a,9b-dodecahydro-3-hydroxy-6-(2-hydroxyethyl)-
3,3a,6-trimethyl- 903-70-8, 2,3-Secoandrost-4-en-3-oic acid,
17.beta.-hydroxy-17-methyl-2-oxo- 903-70-8, 7H-Benz[e]indene-
.DELTA.7,.alpha.-acetic acid, 6-(formylmethyl)-1,2,3,3a,4,5,5a,6,8,9,9a,9b-
dodecahydro-3-hydroxy-3,3a,6-trimethyl- 1042-56-4, 2-0xa-
5.alpha., 17.alpha.-pregnan-3-one, 17-hydroxy-
                                                 1099-81-6,
1H-Benz[e]indene-7-acetic acid, dodecahydro-3-hydroxy-6(2-hydroxypropyl)-3,3a,6-trimethyl- 13974-41-9, 5.alpha.-Estr-1-en-3-one,
17.beta.-hydroxy-17-methyl-
                              15019-21-3, 5.alpha.-Estr-1-en-3-one,
17.beta.-hydroxy-, acetate
                              26667-13-0, 2-Oxaandrost-4-ene-3,17-dione
33767-87-2, 5.alpha.-Estran-3-one, 17.beta.-hydroxy-, acetate
54897-10-8, 19-Nor-5.alpha.,17.alpha.-pregn-1-en-3-one, 17-hydroxy-
63973-71-7, 2-Oxaandrost-4-en-3-one, 17.beta.-hydroxy-
                                                           73991-16-9,
5.alpha.-Estr-1-en-3-one, 17.beta.-hydroxy-
                                              92473-02-4,
2-Oxaandrost-4-en-3-one, 17.beta.-hydroxy-17-methyl-
                                                         94003-59-5,
2-Oxa-5.alpha.-androstane-3,17-dione
                                       94440-68-3, Androst-4-ene-3,17-
dione, 1,2-dihydroxy-
                       94595-21-8, 5.alpha.-Androst-1-ene-3,17-dione,
4,5-dihydroxy-
                 95168-85-7, Estr-4-ene-16.alpha.,17.beta.-diol
95369-80-5, 5.alpha.-Androstan-3-one, 6.beta., 19-epoxy-17.beta.-hydroxy-17-
methyl-
          95370-00-6, 5.alpha.-Androst-1-en-3-one, 4,5,17.beta.-trihydroxy-
17-methyl-
             96364-81-7, Androst-4-en-3-one, 1,2,17.beta.-trihydroxy-17-
         98658-79-8, 7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid,
6-formyl-1,2,3,3a,4,5,5a,6,8,9,9a,9b-dodecahydro-3a,6-dimethyl-3-oxo-
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IT

IT

ΙT

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98843-08-4, 1,2-Seco-A-norandrost-3(5)-en-2-oic acid, 1,17-dioxo-
     99729-06-3, 1H-Benz[e]indene-7-acetic acid, 6-formyldodecahydro-3-hydroxy-
     3,3a,6-trimethyl- 99785-02-1, 1H-Benz[e]indene-7-acetic acid,
     dodecahydro-3-hydroxy-6-(2-hydroxyethyl)-3,3a,6-trimethyl-
                                                                  100173-14-6,
     7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid, 6-formyl-
     1,2,3,3a,4,5,5a,6,8,9,9a,9b-dodecahydro-3-hydroxy-3,3a,6-trimethyl-
     105564-75-8, 1,2-Seco-A-norandrost-3(5)-en-2-oic acid,
     17.beta.-hydroxy-17-methyl-1-oxo- 106599-27-3,
     2,3-Seco-5.alpha.-androstan-3-oic acid, 2,17.beta.-dihydroxy-17-methyl-
        (prepn. of)
IT
     163-72-4, 6,10-(Epoxymethano)-10H-cyclopenta[a]phenanthrene
                                                                    219-13-6,
     Cyclopenta [5, 6] naphtho [1, 2-c] pyran
        (steroid derivs.)
L2
     ANSWER 237 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1963:475550 CAPLUS
DN
     59:75550
OREF 59:14067e-g'
TΙ
     17.beta.-Hydroxy-17.alpha.-methyl,2-oxa-3-oxo-5.alpha.-androstane
     Pappo, Raphael
     G. D. Searle & Co.
PA
SO
    13 pp.
DT
    Patent
    Unavailable
LΑ
CC
     42 (Steroids)
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                            -----
     FR M1697
PΙ
                            19630318
                                           FR
     GB 968206
PRAI US
                            19600517
     The title lactone (I) was prepd. from 17.beta.-hydroxy-17.alpha.-methyl-3-
     oxo-5.alpha.-androst-lene (II) via the corresponding hydroxy acid (III).
     I showed androgenic and myotropic activity with no estrogenic,
     progestational, or antiinflammatory activity. Thus, 40 parts Pb(AcO)4,
     0.6 part OsO4, 6.36 parts II, 95 parts AcOH, and 12 parts H2O was kept at
     room temp. 24 hrs., treated with 2 parts Pb(AcO)4, evapd. in vacuo, the
     residue extd. with benzene, the ext. washed with H2O, extd. with aq.
     KHCO3, the aq. ext. washed with Et2O, acidified with dil. H2SO4, extd.
     with AcOEtbenzene, the ext. washed with H2O, dried, concd. to dryness,
     dissolved in 20 parts C5H5N and 10 parts 20% aq. NaHSO3, stirred 20 min.,
     dild. with H2O, washed with AcOEt, acidified with dild. H2SO4, and extd.
     with benzene to give III. Redn. of III with NaBH4 in aq. NaOH at pH 10
     gave I, m. 235-8.degree., [.alpha.]D -23.degree. (c 1, CHCl3).
ΙT
     Androgenic hormones or principles
        (17.beta.-hydroxy-17-methyl-2-oxa-5.alpha.-androsan-3-one as)
IT
     Muscles
        (17.beta.-hydroxy-17-methyl-2-oxa-5.alpha.-androstan-3-one effect on)
IT
     Spectra, infrared
        (of 17.beta.-hydroxy-17-methyl-2-oxa-5.alpha.-androstan-3-one)
IT
     53-39-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-
     methyl-
        (prepn. of)
IT
     219-13-6, Cyclopenta[5,6]naphtho[1,2-c]pyran
        (steroid derivs.)
L2
     ANSWER 238 OF 239 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1963:4327 CAPLUS
DΝ
     58:4327
OREF 58:724g-h,725a
ΤI
     Oxandrolone; a potent anabolic steroid of novel chemical configuration
ΑU
     Fox, Maurice; Minot, Ann S.; Liddle, Grant W.
CS
     Vanderbilt Univ., Nashville, TN
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SO
     J. Clin. Endocrinol. Metab. (1962), 22, 921-4
DT
     Journal
     Unavailable
LA
CC
     58 (Hormones)
AΒ
     Oxandrolone (17.alpha.-methyl-2-oxa-5.alpha.-androstan-17.beta.-ol-3-one)
     was assayed in human subjects by the oral route of administration. The
     anabolic potency was estd. to be 6.3 times that of methyltestosterone (95%
     confidence limits 3.8 to 10.6). Perceptible N-sparing activity was noted at a daily dose level of 0.6 mg. Oxandrolone did not suppress
     corticotropin secretion in man at a dose of 40 mg./day, and had. no effect
     on circulating eosinophils at dosage levels of 5 and 20 mg. Significant
     but reversible retention of sulfobromophthalein and slight elevation of
     serum glutamic-oxalacetic transaminase concns. were noted in most patients
     treated with 10 mg. daily for 1 month. This compd. had no effect on serum
     proteins, bilirubin, alk. phosphatase, or cholesterol, or on the
     cephalin-cholesterol flocculation reaction.
IT
     53-39-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-
     methyl-
        (effect on N metabolism)
     219-13-6, Cyclopenta[5,6]naphtho[1,2-c]pyran
ΙT
        (steroid derivs., effect on N metabolism)
L2
     ANSWER 239 OF 239 CAPLUS COPYRIGHT 2003 ACS
AN
     1962:449501 CAPLUS
DN
     57:49501
OREF 57:9913f-i,9914a-h
TI
     2 Oxasteroids. New class of biologically active compounds
ΑU
     Pappo, Raphael; Jung, Christopher J.
CS
     G. D. Searle & Co., Skokie, IL
SO
     Tetrahedron Letters (1962) 365-71
DT
     Journal
LĄ
     Unavailable
     36 (Steroids)
CC
GΙ
     For diagram(s), see printed CA Issue.
AΒ
     cf. CA 51, 4330c. Treatment of 1 androstene3,17 dione 16 hrs. at
     20.degree. with 4 equivs. Pb(OAc)4 in 905% aq. AcOH and the seco aldehyde
     reduced with aq. NaBH4 followed by acid treatment yielded 50-60%
     17.beta.-hydroxy-2-oxa-3-androstanone (I, R = OH, H) (II), m.
     198-203.degree., .lambda. 2.75, 5.78 .mu., [.alpha.]24D 1.0.degree.,
     oxidized with CrO3 to I (R = O), m. 174-5.degree., .lambda. 5.77 .mu..
     Similar treatment of 17.beta.-hydroxy-17.alpha.-methyl-1-androsten-3 one
     (III) led to the corresponding 17.beta.-hydroxy-1-oxo-1,2-seco-A-nor-
     17.alpha.-methylandrostane-2-carboxylic acid, m. 166-73.degree.
     (decompn.), 2.77, 2.85, 3.70, 5.80 .mu., [.alpha.]25D -22.5.degree., also
     obtained by Pb(OAc)4 cleavage of 1.alpha., 2.alpha., 17.beta.-trihydroxy-
     17.alpha.-methyl-3androstanone, m. 180-8.degree. (decompn.), .lambda.
     2.80, 2.89, 5.81 .mu., [.alpha.]26D 15.degree., prepd. by hydroxylation of
     III with KClO3 in the presence of catalytic amts. of OsO4 in aq. Me3COH.
     The aldehyde acid reduced with NaBH4 gave 1 (R = OH, Me) (IV), m.
     235-8.degree., .lambda. 2.87, 5.79 .mu., [.alpha.]25D -23.degree..
     Synthesis of the analogous 4,5-unsatd. compds. proved to be considerably
    more difficult. Treatment of 1,4-androstadiene-3,17-dione in Me3COH with
     KClO3 in the presence of OsO4 gave mainly V (R = O), m. 205-9.degree.,
     .lambda. 228 m.mu. (.epsilon. 9500, MeOH), .lambda. 2.80, 2.88, 5.76, 5.93
     .mu., [.alpha.]28D 151.degree.. The mother liquors fractionally crystd.
     yielded 10\% 1.alpha., 2.alpha.-dihydroxy-4-androstene-3,17-dione (VI, R =
     O), [m. 205-9.degree., .lambda. 238 m.mu. (.epsilon. 13,700), .lambda.
     2.80, 2.87, 5.75, 5.95, 6.19 .mu., [.alpha.]27D 168.5.degree.. The ketone
     cleaved with Pb(OAc)4 in aq. AcOH at about 60.degree. gave VII (R = 0)
     (VIII), m. 250-9.degree., .lambda. 226 m.mu. (.epsilon. 14,000), .lambda.
     2.80, 3.00, 5.78, 5.88, 6.12 .mu., [.alpha.]27D 279.5.degree. (existing
    mainly in the lactol form, 1-hydroxy-2oxa-4-androstene-3,17-dione). VIII
```

in CHCl3 stirred with 1 equiv. NaOH in the presence of excess NaBH4 gave pure 17.beta.-hydroxy-2-oxa-4-androsten-3-one (IX, R = .beta.-OH, H) (X), m. 205-7.degree., .lambda. 223.5 m.mu. (.epsilon. 14,500), .lambda. 2.76, 5.80, 5.88, 6.14 .mu., [.alpha.] 28D 173.degree.. Similar treatment of 17.beta.-hydroxy-17.alpha.-methyl-1,4-androstadien-3-one gave predomi-nantly \hat{V} (R = .beta.-OH, Me) (XI), m. 196-9.degree., .lambda. 229.5 m.mu. (.epsilon. 9350), .lambda. 281, 2.89, 5.93, 6.20 .mu., [.alpha.]26D 57.5.degree.. Fractional crystn. of the mother liquors and removal of residual XI with aq. NaHSO3 in C5H5N gave the required isomeric VI (R = .beta.-OH, Me) (XII), m. 1993.0-5.5.degree., .lambda. 239 m.mu., (.epsilon. 13,300), .lambda. 2.85, 3.00, 5.90, 5.96, 6.1 .mu. (KBr), [.alpha.]27D 63.degree.. XI and XII separately treated with Pb(OAc)4 in AcOH gave 17.beta.hydroxy-3,5-seco-5-oxo-17.alpha.-methyl-A-nor-1androstene3-carboxylic acid (lactol form, 5,17.beta.-dihydroxy-17.alpha.methyl-4-oxa-1-androsten-3-one) (XIII), m. 227-30.degree., .lambda. 220 m.mu. (.epsilon. 7500), .lambda. 3.00, 3.15, 5.93, 6.18 .mu., and the lactol VII (R = .beta.-OH, Me) (XIV), m. 250-65.degree., .lambda. 226 m.mu. (.epsilon. 14,200), .lambda. 2.85, 3.05, 5.85, 6.13 .mu. (KBr). Treatment of XIII and XIV in CHCl3 with dil. aq. K2CO3 or Na2CO3 extd. XIII selectively since XIV was only sol. in dil. NaOH. Reduction of XIV in CHCl3 gave 17.beta.-hydroxy-17.alpha.-methyl-2-oxa-4-androsten-3one, (XV), m. 230-40.degree. (decompn.), .lambda. 223.5 m.mu. (.epsilon. 12,500), .lambda. 2.75, 5.78, 5.85, 6.13 .mu., [.alpha.]26D 123.degree.. Application of the same series of reactions to .DELTA.1-progesterone gave a mixt. of 1,2-dihydroxyprogesterone and 4,5-dihydroxy-1-pregnene3,20dione, converted by treatment with Pb(OAc)4 to a mixt. of VII (R = .beta.-Ac, H) (XVI) and 5-hydroxy-4-oxa-1pregnene-3,20-dione (XVII), sepd. by partition with aq. K2CO3 to give pure XVI, m. 220-3.degree., .lambda. 226.5 m.mu. (.epsilon. 14,300), .lambda. 2.80, 3.00, 5.79, 5.88, 6.12 .mu., [.alpha.]26D 268.degree. (0.5%) and pure XVII, m. 203-6.degree., .lambda. 220 m.mu. (.epsilon. 8300), .lambda. 2.80, 2.97, 5.80, 5.87 .mu., [.alpha.]28D 275.5.degree.. XVI reduced with NaBH4 in a 2 phase system and the epimeric 20-hydroxy compds. oxidized with CrO3 gave IX (R =.beta.-Ac, H) (XVII), m. 168-9.degree., .lambda. 223.9 m.mu. (.epsilon. 14,150), .lambda. 5.80, 5.85, 6.13 .mu., [.alpha.] 26D 237.5.degree.. An analogous series of reactions converted 17.alpha.-acetoxy-.DELTA.1progesterone to 17.alpha.-acetoxy-1-hydroxy-2-oxaprogesterone VII (R = .beta.-Ac, OAc), m. 285.8.degree. (decompn.), .lambda. 226 m.mu. (.epsilon. 14,400), .lambda. 2.75, 2.98, 5.76, 6.10, 7.90 .mu., [.alpha.]24D 137.degree., reduced by NaBH4 in Me2CHOH to give IX (R =.beta.-Ac, OAc) (XVIII), m. 275-9.degree., .lambda. 223.5 m.mu. (.epsilon. 14,900), .lambda. 5.80, 5.83, 6.15, 7.97 .mu., [.alpha.]23D 114.5.degree.. XV is about as anabolic as 17.alpha.-methyltestosterone but only 20% as androgenic by intramuscular injection in the levator ani test. IV was more active than 17.beta.-hydroxy-17.alpha.-methyl-3-androstanone as an oral anabolic agent in the N retention test but is essentially devoid by androgenic properties. XVII and XVIII are about as active as progesterone and 17-acetoxy progesterone resp. in rabbits in the Clauberg assay. The biol. equivalence of the 2-oxa corticoids to the corresponding normal steroids is not compatible with the considerable chem. difference between lactones and ketones and it was assumed that the 3-CO group is not involved chemically in the mechanism of biol. action of these hormones. Spectra, infrared (of 2-oxasteroids and intermediates) Spectra, visible and ultraviolet (of 4.alpha.,5-dihydroxy-5.alpha.-androst-1-ene-3,17-dione and

ΙT

ΙT

congeners)

IT 95126-10-6, 2-Oxaandrost-4-ene-3,17-dione, 1-hydroxy-(equil. with 1,17-dioxo-1,2-seco-A-norandrost-3(5)-en-2-oic acid)

ΙT 98658-79-8, 7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid, 6-formyl-1,2,3,3a,4,5,5a,6,8,9,9a,9b-dodecahydro-3a,6-dimethyl-3-oxo-98843-08-4, 1,2-Seco-A-norandrost-3(5)-en-2-oic acid, 1,17-dioxo-

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104831-96-1, 4-Oxaandrost-1-en-3-one, 5,17.beta.-dihydroxy-17-methyl-
ΙT
        (in equil. with 17.beta.-hydroxy-17-methyl-5-oxo-3,5-seco-A-norandrost-
        1-en-3-oic acid)
     100150-69-4, 1H-Benz[e]indene-6-acrylic acid, 2,3,3a,4,5,5a,6,7,8,9,9a,9b-
ΙT
     dodecahydro-3-hydroxy-3,3a,6-trimethyl-7-oxo- 105564-76-9,
     3,5-Seco-A-norandrost-1-en-3-oic acid, 17.beta.-hydroxy-17-methyl-5-oxo-
        (in equil. with 5,17.beta.-dihydroxy-17-methyl-4-oxaandrost-1-en-3-one)
     53-39-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-
IT
               794-12-7, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-
     901-87-1, 1,2-Seco-A-nor-5.alpha.-androstan-2-oic acid,
     17.beta.-hydroxy-17-methyl-1-oxo- 1805-13-6, 5.alpha.-Androst-1-ene-3,17-
     dione, 4.alpha.,5-dihydroxy- 26609-24-5, 2-0xapregn-4-ene-3,20-dione
     38851-97-7, 2-0xaandrost-4-en-3-one, 1,17.beta.-dihydroxy-17-methyl-
     63973-71-7, 2-0xaandrost-4-en-3-one, 17.beta.-hydroxy-
                                                               92473-02-4,
     2-Oxaandrost-4-en-3-one, 17.beta.-hydroxy-17-methyl-
                                                            94003-59-5,
     2-Oxa-5.alpha.-androstane-3,17-dione
                                            94761-20-3, 5.alpha.-Androstan-3-
     one, 1.alpha., 2.alpha., 17.beta.-trihydroxy-17-methyl-
                                                              95172-05-7,
     2-Oxapregn-4-ene-3,20-dione, 17-hydroxy-, acetate
                                                          95585-10-7.
     5.alpha.-Androst-1-en-3-one, 4.alpha., 5, 17.beta.-trihydroxy-17-methyl-
     95720-13-1, Androst-4-ene-3,17-dione, 1.alpha.,2.alpha.-dihydroxy-
     95946-65-9, 2-0xapregn-4-ene-3,20-dione, 1-hydroxy-
                                                           96002-84-5,
     2-Oxapregn-4-ene-3,20-dione, 1,17-dihydroxy-, 17-acetate
                                                                 96478-50-1,
     Androst-4-en-3-one, 1.alpha., 2.alpha., 17.beta.-trihydroxy-17-methyl-
     99729-06-3, 1H-Benz[e]indene-7-acetic acid, 6-formyldodecahydro-3-hydroxy-
     3,3a,6-trimethyl-
                         100194-71-6, 4-Oxapregn-1-ene-3,20-dione, 5-hydroxy-
        (prepn. of)
     219-13-6, Cyclopenta[5,6]naphtho[1,2-c]pyran
ΙT
                                                     219-18-1,
     Cyclopenta [5, 6] naphtho [2, 1-b] pyran
        (steroid derivs.)
=> e dermal
E1
             1
                   DERMAINSPECT/BI
E2
             2
                   DERMAITIS/BI
E3
         11724 --> DERMAL/BI
E4
             1
                   DERMALAL/BI
E5
             3
                   DERMALEPIDERMAL/BI
Е6
             1
                   DERMALEX/BI
E7
             1
                   DERMALGIA/BI
E8
             2
                   DERMALICHT/BI
E9
             1
                   DERMALIGHT/BI
E10
             1
                   DERMALIN/BI
                   DERMALITIDIS/BI
E11
             1
E12
             1
                   DERMALIVE/BI
=> s e3
L3
        11724 DERMAL/BI
=> s 13 and 12
             0 L3 AND L2
=> d his
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     FILE 'REGISTRY' ENTERED AT 13:01:28 ON 03 APR 2003
L1
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     FILE 'CAPLUS' ENTERED AT 13:02:16 ON 03 APR 2003
L2
            239 S L1
                E DERMAL
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(in equil. with 1-hydroxy-2-oxaandrost-4-ene-3,17-dione)

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L3
          11724 S E3
              0 S L3 AND L2
L4
=> e theraputic
E1
             1
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E2
             2
                   THERAPUS/BI
E3
            24 --> THERAPUTIC/BI
E4
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                   THERAPUTICAL/BI
E5
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E6
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E11
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E12
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=> s 12 and 15
            41 L2 AND L5
L6
=> d 16 20-41
L6
     ANSWER 20 OF 41 CAPLUS COPYRIGHT 2003 ACS
AN
     1997:560862 CAPLUS
DN
     127:200215
ΤI
     Oxandrolone, an anabolic steroid, significantly increases the rate of
     weight gain in the recovery phase after major burns
ΑU
     Demling, Robert H.; Desanti, Leslie
CS
     Brigham and Women's Hospital Burn Center and Braintree Rehabilitation
     Hospital, Boston, MA, 02115, USA
SO
     Journal of Trauma: Injury, Infection, and Critical Care (1997), 43(1),
     CODEN: JOTRFA; ISSN: 1079-6061
PB
    Williams & Wilkins
DT
     Journal
    English
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    ANSWER 21 OF 41 CAPLUS COPYRIGHT 2003 ACS
    1997:392604 CAPLUS
AN
DN
     127:117501
    Androgen stimulation of lacrimal gland function in mouse models of
ΤI
     Sjogren's syndrome
     Sullivan, David A.; Edwards, Joan A.
ΑU
     Schepens Eye Research Institute and Department of Ophthalmology, Harvard
CS
    Medical School, Boston, MA, 02114, USA
SO
    Journal of Steroid Biochemistry and Molecular Biology (1997), 60(3/4),
    237-245
    CODEN: JSBBEZ; ISSN: 0960-0760
PB
    Elsevier
DT
    Journal
LΑ
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- L6 ANSWER 22 OF 41 CAPLUS COPYRIGHT 2003 ACS
- AN 1997:371563 CAPLUS
- DN 127:45182
- TI Final height outcome in girls with Turner syndrome treated with a combination of low dose estrogen and oxandrolone
- AU Bareille, P.; Massarano, A. a.; Stanhope, R.
- CS Med. Unit, Inst. Child Health, London, WC1N 1EH, UK
- SO European Journal of Pediatrics (1997), 156(5), 358-362 CODEN: EJPEDT; ISSN: 0340-6199
- PB Springer
- DT Journal
- LA English
- L6 ANSWER 23 OF 41 CAPLUS COPYRIGHT 2003 ACS
- AN 1997:165560 CAPLUS
- DN 126:233848
- TI Growth promotion and Turner-specific bone age after **therapy** with growth hormone and in combination with oxandrolone: when should **therapy** be started in Turner syndrome?
- AU Joss, E. E.; Mullis, P. E.; Werder, E. A.; Partsch, C. J.; Sippell, W. G.
- CS Department Paediatrics, University Bern, Switz.
- SO Hormone Research (1997), 47(3), 102-109 CODEN: HRMRA3; ISSN: 0301-0163
- PB Karger
- DT Journal
- LA English
- L6 ANSWER 24 OF 41 CAPLUS COPYRIGHT 2003 ACS
- AN 1997:146236 CAPLUS
- DN 126:207687
- TI The influence of growth hormone monotherapy and growth hormone in combination with oxandrolone or testosterone on thyroxid hormone parameters and thyroxine binding globulin in patients with Ullrich-Turner syndrome
- AU Schmitt, K.; Haeusler, G.; Bluemel, P.; Ploechl, E.; Waldhoer, T.; Frisch,
- CS Children's Hospital Linz, Linz, A-4020, Austria
- SO European Journal of Pediatrics (1997), 156(2), 99-103 CODEN: EJPEDT; ISSN: 0340-6199
- PB Springer
- DT Journal
- LA English
- L6 ANSWER 25 OF 41 CAPLUS COPYRIGHT 2003 ACS
- AN 1996:108741 CAPLUS
- DN 124:220947
- TI Improved final height in girls with Turner's syndrome treated with growth hormone and oxandrolone
- AU Nilsson, karl Olof; Albertsson-Wikland, Kerstin; Alm, Jan; Aronson, Stefan; Gustafsson, Jan; Hagenaes, Lars; Haeger, Anders; Ivarsson, Sten A.; Karlberg, Johan; et al.
- CS Dep. of Pediatrics and Diagnostic Radiology, Univ. Hospital, Malmo, Swed.
- SO Journal of Clinical Endocrinology and Metabolism (1996), 81(2), 635-40 CODEN: JCEMAZ; ISSN: 0021-972X
- PB Endocrine Society
- DT Journal
- LA English
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- AN 1996:108724 CAPLUS
- DN 124:221117
- TI Insulin, insulin-like growth factor-binding protein-1, and sex

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hormone-binding globulin in patients with Turner's syndrome: course over
     age in untreated patients and effect of therapy with growth
     hormone alone and in combination with oxandrolone
ΑU
     Haeusler, Gabriele; Schmitt, K.; Bluemel, P.; Ploechl, E.; Waldhoer, Th.;
     Frisch, H.
     Pediatric Dep. Inst. Tumor Biol. Cancer Res., Univ. Vienna, Austria
CS
     Journal of Clinical Endocrinology and Metabolism (1996), 81(2), 536-41
SO
     CODEN: JCEMAZ; ISSN: 0021-972X
PB
     Endocrine Society
DT
     Journal
LΑ
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L6
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AN
     1996:10008 CAPLUS
     124:53554
DN
     Immunocytochemical location and hormonal control of androgen receptors in
ΤI
     lacrimal tissues of the female MRL/Mp-lpr/lpr mouse model of Sjogren's
ΑU
     Ono, Masafumi; Rocha, Flavio Jaime; Sullivan, David A.
CS
     Schepens Eye Res. Inst., Boston, MA, USA
SO
     Experimental Eye Research (1995), 61(6), 659-66
     CODEN: EXERA6; ISSN: 0014-4835
    Academic
PΒ
DT
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LΑ
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L6
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AN
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DN
     121:222993
TI
    Methods and formulations for use in treating oophorectomized women
IN
     Pike, Malcolm C.; Spicer, Darcy V.
     University of Southern California, USA
PΑ
     U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 952,513.
     CODEN: USXXAM
DΤ
     Patent
LA
    English
FAN.CNT 3
     PATENT NO.
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                                       APPLICATION NO. DATE
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                                       US 1993-62886 19930517
    US 5211952
                    A 19930518
                                        US 1991-684612 19910412
                    A 19940823
A1 19941124
    US 5340584
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                                                         19930201
    WO 9426208
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    NO 9504612
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    US 1993-952513
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    US 1993-62886
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L6
    ANSWER 29 OF 41 CAPLUS COPYRIGHT 2003 ACS
ΑN
    1994:24366 CAPLUS
DN
    120:24366
ΤI
    Ocular androgen therapy in Sjogren's syndrome
IN
    Sullivan, David A.
PΑ
    Schepen's Eye Research Institute, Inc., USA
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PCT Int. Appl., 33 pp.

CODEN: PIXXD2

SO

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FAN.CNT 5
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PΙ
     WO 9320823
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                                        AU 1993-41121
     AU 9341121
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                           19970109
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                           19991020
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                     T2 19950928
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                          19991115
                                         AT 1993-910732
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PRAI US 1992-871657
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L6
    1990:565620 CAPLUS
AN
     113:165620
DN
     Effect of oxandrolone and growth hormone on growth rate in Turner syndrome
TI
ΑU
     Park, Kwang Sun; Lee, Byung Churl
CS
     Med. Coll., Cathol. Univ., Seoul, S. Korea
     K'at'ollik Taehak Uihakpu Nonmunjip (1990), 43(1), 139-46
     CODEN: KTUNAA; ISSN: 0368-7015
DT
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LA
     Korean
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     1986:603364 CAPLUS
ΑN
DN
     105:203364
TΙ
     The effect of oxandrolone on the growth hormone response to growth
     hormone-releasing hormone in children with constitutional growth delay
ΑU
     Loche, S.; Corda, R.; Lampis, A.; Puggioni, R.; Cella, S. G.; Muller, E.
     E.; Pintor, Carlo
CS
     1st Dep. Pediatr., Univ. Cagliari, Cagliari, Italy
     Clinical Endocrinology (Oxford, United Kingdom) (1986), 25(2), 195-200
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DT
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L6
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AN
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DN
     The effect of androgens on the pulsatile release and the twenty-four-hour
TТ
     mean concentration of growth hormone in peripubertal males
ΑU
     Link, Kathleen; Blizzard, Robert M.; Evans, William S.; Kaiser, Donald L.;
     Parker, Mark W.; Rogol, Alan D.
     Med. Cent., Univ. Virginia, Charlottesville, VA, 22908, USA
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SO
     Journal of Clinical Endocrinology and Metabolism (1986), 62(1), 159-64
     CODEN: JCEMAZ; ISSN: 0021-972X
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    92:209155
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    High density lipoproteins during hypolipidemic therapy. A
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     Cheung, Marian C.; Albers, John J.; Wahl, Patricia W.; Hazzard, William R.
     Northwest Lipid Res. Clin., Univ. Washington, Seattle, WA, 98104, USA
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     Atherosclerosis (Shannon, Ireland) (1980), 35(3), 215-28
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     factorial study on experimental acute nephrotic hyperlipidemia
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     Schapel, G. J.; Edwards, K. D. G.
CS
     Kanematsu Mem. Inst., Sydney Hosp., Sydney, Australia
SO
     Journal of Pharmacology and Experimental Therapeutics (1975), 194(1),
     274-84
     CODEN: JPETAB; ISSN: 0022-3565
DT
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     1974:461630 CAPLUS
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     81:61630
TI
     Bone turnover-sex hormone-parathyroid hormone interrelations in
     postmenopausal osteoporosis
ΑU
     Riggs, B.; Jowsey, J.; Kelly, P. J.; Arnaud, C. D.
     Mayo Clin. Mayo Med. Sch., Rochester, MN, USA
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     Bollettino - Societa Italiana di Biologia Sperimentale (1973), 49(12),
     732 - 7
     CODEN: BSIBAC; ISSN: 0037-8771
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     1969:93684 CAPLUS
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TI
     Nutritional and metabolic effects of anabolic steroids and corticosteroids
ΑU
     Albanese, Anthony A.
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     Nutr. and Metab. Res. Div., Burke Rehabil. Center, White Plains, NY, USA
     Journal of the American Medical Women's Association (1969), 24(1), 42-51
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AN
DN
     70:36402
TI
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ΑU
     Gursel, Erol; Zinsser, Hans H.
CS
     Coll. of Phys. and Surg., Columbia Univ., New York, NY, USA
SO
     Medical Times (1968), 96(11), 1133-48
     CODEN: METIA9; ISSN: 0092-7309
DT
     Journal
LΑ
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L6
     ANSWER 38 OF 41 CAPLUS COPYRIGHT 2003 ACS
AN
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DN
     69:93395
TI
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ΑU
    Albanese, Anthony A.
CS
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Burke Rehabilitation Center, White Plains, NY, USA

Medical Times (1968), 96(9), 871-81

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     1968:474303 CAPLUS
AN
DN
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     Oxandrolone effect on growth and bone age in idiopathic growth failure
TΙ
AU
     Geller, Jack
CS
     Albert Einstein Coll. of Med., Yeshiva Univ., Bronx, NY, USA
     Acta Endocrinologica (1968), 59(2), 307-16
SO
     CODEN: ACENA7; ISSN: 0001-5598
DT
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L6
     ANSWER 40 OF 41 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1968:570 CAPLUS
ĎΝ
     68:570
ΤI
     Effect of anabolic steroids on plasma glycoproteins
ΑU
     Sachs, Bernard A.; Wolfman, Lila
     Montefiore Hosp. and Med. Center, New York, NY, USA
CS
     Nature (London, United Kingdom) (1967), 216(5112), 297-8
SO
     CODEN: NATUAS; ISSN: 0028-0836
DT
     Journal
LA
     English
L6
     ANSWER 41 OF 41 CAPLUS COPYRIGHT 2003 ACS
     1965:447612 CAPLUS
AN
     63:47612
DN
OREF 63:8685c-e
ΤI
     Oxandrolone therapy of growth retardation
ΑU
     Danowski, T. S.; Lee, F. A.; Cohn, R. E.; D'Ambrosia, R. D.; Limaye, N. R.
CS
     Univ. of Pittsburgh, Pittsburgh, PA
SO
     Am. J. Diseases Children (1965), 109(6), 526-32
DT
     Journal
     English
LA
=> d 16 36 32 29 28 all
L6
     ANSWER 36 OF 41 CAPLUS COPYRIGHT 2003 ACS
AN
     1969:93684 CAPLUS
DN
     70:93684
     Nutritional and metabolic effects of anabolic steroids and corticosteroids
TΙ
AU
     Albanese, Anthony A.
CS
     Nutr. and Metab. Res. Div., Burke Rehabil. Center, White Plains, NY, USA
     Journal of the American Medical Women's Association (1969), 24(1), 42-51
SO
     CODEN: JAMWAN; ISSN: 0091-7427
DT
     Journal
LA
     English
CC
     4 (Hormones)
AΒ
     The steroid protein activity index (SPAI), a measurement of anabolic
     activity, was reported for orally administered anabolic steroids
     (testosterone propionate, 19-nortestosterone, norethandrolone,
     oxandrolone, 4-hydroxy-17.alpha.-methyltestosterone, methandrostenolone,
     stanozolol, norbolethione, 17.beta. - trimethylsiloxyandrost-4-en-3-one,
     BAS-71, and 17.beta.-hydroxy-2-oxa-19-norandrosta-4,9(10)-dien-3-one),
     corticosteroids (prednisone, prednisolone, triamcinolone, dexamethasone,
    paramethasone, betamethasone, and fluocortolone), as well as for
    parenteral anabolic steroids (dromostanolone propionate, stanozolol,
    methenolone enanthate, bolmantalate, oxandrolone, bolandiol dipropionate
     (SC-7525), SKF-6611, and SKF-8048). Trials with the oral administration
```

of corticosteroids, followed by a period of combined corticosteroid and anabolic steroid therapy, permitted the detn. of the anticor-ticocatabolic activity index (ACAI). From this, the pos. action of the anabolic steroids on N retention could be quantitated and dosage relation established. ST anabolic steroids activity; corticoids anabolic steroids; steroids anabolic corticoids; steroid protein activity index ITProteins RL: BIOL (Biological study) (metabolic retention of, detn. of steroid action on) IT BAS 71 RL: BIOL (Biological study) (nitrogen retention response to, calcn. of) IT Cyclopenta[5,6]naphtho[1,2-c]pyran, oxasteroid derivs. RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 50-02-2, biological studies 50-24-8, biological studies IT 53-03-2 53-33-8 **53-39-4** 57-85-2 72-63-9 124-94-7 145-12-0 152-97-6 302-96-5 303-42-4 378-44-9 434-22-0 797-58-0 1164-99-4 1491-81-2 1986-53-4 5055-42-5 20111-37-9 22467-98-7 RL: BIOL (Biological study) (nitrogen retention response to, calcn. of) ANSWER 32 OF 41 CAPLUS COPYRIGHT 2003 ACS L6 ΑN 1986:45939 CAPLUS DN 104:45939 TIThe effect of androgens on the pulsatile release and the twenty-four-hour mean concentration of growth hormone in peripubertal males Link, Kathleen; Blizzard, Robert M.; Evans, William S.; Kaiser, Donald L.; ΑU Parker, Mark W.; Rogol, Alan D. Med. Cent., Univ. Virginia, Charlottesville, VA, 22908, USA CS SO Journal of Clinical Endocrinology and Metabolism (1986), 62(1), 159-64 CODEN: JCEMAZ; ISSN: 0021-972X DΤ Journal LA English CC 2-4 (Mammalian Hormones) AΒ The effects of oxandrolone (Ox) [53-39-4] and testosterone (T) [58-22-0] on the mean concn. of growth hormone (GH) [9002-72-6], the pattern of GH secretion, and somatomedin C (SmC) [67763-96-6] concns. in boys with short stature and (or) delayed sexual development were studied to det. whether their growth-promoting effects might be mediated through endogenous GH release. Ten boys received Ox (0.1 mg/kg/day, orally) for 65 days, and 5 boys received T propionate (7.5 mg, i.m., for 7 days), followed by T enanthate (100 mg, i.m., monthly for 3 mo). Serum GH was measured in samples obtained at 20-min intervals for 24 h before and 65 days after the initiation of therapy. SmC levels were measured twice during the same 24-h period before and 65 days after initiation of therapy. In the boys treated with T, there were increases in the mean concn. of GH (4.3-fold), in the no. of GH pulses .gtoreq.10 ng/mL, (1.6 vs. 4.8/24 h), and in the SmC levels (0.82 vs. 2.3 .mu./mL). There were, however, no significant changes in the boys treated with Ox. Both Ox and T improved the growth rates; however, T increased the growth rate by 0.95~cm/mo, and 0x increased the growth rate by 0.24~cm/mo. Thus, T, but not Ox, at the doses tested increases GH secretion in boys with short stature and (or) delayed sexual development. This increase in GH secretion may contribute to the increased growth rate in males at puberty. ST androgen somatotropin secretion puberty; testosterone somatotropin secretion puberty; oxandrolone somatotropin secretion puberty; growth

IT Blood serum

hormone secretion androgen

(growth hormone and somatomedin C of, of boy in puberty, androgens

```
effect on)
     Androgens
IΤ
     RL: BIOL (Biological study)
        (growth hormone secretion response to, in puberty in boy)
ΙT
     Puberty
        (male, growth hormone secretion in, in boy, androgens effect on)
IT
     53-39-4
              58-22-0
     RL: BIOL (Biological study)
        (growth hormone secretion response to, in puberty in boy)
IT
     67763-96-6
     RL: BIOL (Biological study)
        (of blood serum, of boy in puberty, androgens effect on)
IT
     9002-72-6
     RL: BIOL (Biological study)
        (secretion of, by boy in puberty, androgens effect on)
     ANSWER 29 OF 41 CAPLUS COPYRIGHT 2003 ACS
L6
AN
    1994:24366 CAPLUS
DN
     120:24366
TΙ
     Ocular androgen therapy in Sjogren's syndrome
ΤN
     Sullivan, David A.
     Schepen's Eye Research Institute, Inc., USA
PΑ
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM A61K031-56
     2-4 (Mammalian Hormones)
     Section cross-reference(s): 1, 63
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     PATENT NO.
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                                        APPLICATION NO. DATE
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     WO 9320823
PΤ
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                                          WO 1993-US3801 19930421
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    AU 9341121
                     A1
                          19931118
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                     B1 19991020
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 07508716 T2 19950928
                                        JP 1993-518700
                                                          19930421
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                           19970909
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    AT 185697
                     E
                                         AT 1993-910732
                           19991115
                                                           19930421
    ES 2139005
                     T3 20000201
                                         ES 1993-910732
                                                          19930421
PRAI US 1992-871657
                    A
A
                           19920421
    WO 1993-US3801
                           19930421
AB
    The topical application to the ocular surface or adjacent regions of the
     eye of a prepn. contg. a therapeutic amt. of an androgen or androgen
     analog is disclosed as a method of relieving the chronic and acute
    manifestation of dry eye symptoms in Sjogren's syndrome. Effects of e.g.
    testosterone in a mouse model for Sjogren's syndrome are reported.
    androgen Sjogren syndrome keratoconjunctivitis sicca; testosterone Sjogren
ST
     syndrome keratoconjunctivitis sicca; ophthalmic androgen Sjogren syndrome
    keratoconjunctivitis sicca; dry eye Sjogren syndrome androgen
IT
    Lymphocyte
        (androgen therapy effect on Ia-pos., in lacrimal tissue of
       Sjogren syndrome mouse model)
TI
    Sjogren's syndrome
       (androgens for treatment of dry-eye symptoms in)
ΙT
       (deficiency of, in keratoconjunctivitis sicca, treatment of, androgens
       for)
```

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IT
    Androgens
     RL: BIOL (Biological study)
        (dry-eye symptoms in Sjogren's syndrome treatment with)
IT
     Lymphocyte
        (B-cell, androgen therapy effect on, in lacrimal tissue of
        Sjogren syndrome mouse model)
IT
     Histocompatibility antigens
     RL: BIOL (Biological study)
        (Ia (H-2 I-region-assocd.), androgen therapy effect on, in
        lacrimal tissue of Sjogren syndrome mouse model)
IT
     Lymphocyte
        (T-cell, androgen therapy effect on, in lacrimal tissue of
        Sjogren syndrome mouse model)
ΙT
    Lymphocyte
        (T-cell, cytotoxic, androgen therapy effect on, in lacrimal
        tissue of Sjogren syndrome mouse model)
IT
     Lymphocyte
        (T-cell, helper cell, androgen therapy effect on, in lacrimal
        tissue of Sjogren syndrome mouse model)
ΙT
        (T-cell, suppressor cell, androgen therapy effect on, in
        lacrimal tissue of Sjogren syndrome mouse model)
IT
     Lacrimal gland
        (disease, testosterone effect on, in mouse Sjogren syndrome model)
TΤ
     Eye, disease
        (keratoconjunctivitis sicca, tear deficiency in, treatment of,
        androgens for)
IT
     Pharmaceutical dosage forms
        (ophthalmic, of androgens, for dry-eye symptom treatment in Sjogren's
        syndrome)
ΙT
     53-39-4
               58-22-0D, derivs. 434-22-0D, derivs.
                                                       521-18-6D,
     4,5.alpha.-Dihydrotestosterone, derivs.
                                              1225-43-0D, 17.beta.-Hydroxy-
     5.alpha.-androstane, ring A-unsatd. derivs.
     RL: BIOL (Biological study)
        (dry-eye symptoms in Sjogren's syndrome treatment with)
IT
    58-22-0, Testosterone
                            434-22-0, 19-Nortestosterone
    RL: BIOL (Biological study)
        (lacrimal gland immunopathol. of mouse Sjogren syndrome mouse model in
        presence of)
L6
    ANSWER 28 OF 41 CAPLUS COPYRIGHT 2003 ACS
AN
    1994:622993 CAPLUS
DN
    121:222993
    Methods and formulations for use in treating oophorectomized women
TΙ
IN
    Pike, Malcolm C.; Spicer, Darcy V.
PA
    University of Southern California, USA
SO
    U.S., 7 pp. Cont.-in-part of U.S. Ser. No. 952,513.
    CODEN: USXXAM
DT
    Patent
LΑ
    English
    ICM A61K009-50
IC
    ICS A61K009-14
NCL 424426000
CC
    2-4 (Mammalian Hormones)
    Section cross-reference(s): 63
FAN.CNT 3
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     ---- ----
                                          -----
PT
    US 5340586
                    Α
                           19940823
                                          US 1993-62886
                                                          19930517
    US 5211952
                    A 19930518
                                          US 1991-684612 19910412
    US 5340584
                    Α
                           19940823
                                         US 1993-952513 19930201
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WO 1994-US5262 19940512

A1 19941124

WO 9426208

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W: CA, FI, NO
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     EP 748191
                           19961218
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                    CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     NO 9504612
                           19960112
                                          NO 1995-4612
                                                           19951115
                      Α
PRAI US 1991-684612
                            19910412
     US 1993-952513
                            19930201
     WO 1992-US2973
                            19920410
     US 1993-62886
                            19930517
     WO 1994-US5262
                            19940512
AΒ
     Compns. and methods which are effective to prevent symptoms of loss of
     ovarian function (e.g., in oophorectomized women) over a period of time
     are described, consisting essentially of an effective amt. of an
     estrogenic compn. and an effective amt. of an androgenic compn. The
     levels of estrogens and androgens employed are sufficient to reduce bone
     mineral d. loss and minimize other side effects obsd. after oophorectomy,
     and at such low doses as to minimize any adverse impact on the patient's
     long-term prognosis or (in the case of testosterone) result in addnl. side
     effects.
     oophorectomy estrogen androgen combined therapy
ST
IT
     Ovariectomy
        (ovarian failure symptoms treatment with estrogen and androgen
        combinations)
IT
     Androgens
     Estrogens
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ovarian failure symptoms treatment with estrogen and androgen
        combinations)
IT
     Ovary, disease
        (failure, oophorectomy symptoms treatment with estrogen and androgen
        combinations)
IT
     Pharmaceutical dosage forms
        (injections, i.m., ovarian failure symptoms treatment with estrogen and
        androgen combinations)
IT
     Pharmaceutical dosage forms
        (injections, s.c., ovarian failure symptoms treatment with estrogen and
        androgen combinations)
ΙT
     Pharmaceutical dosage forms
        (transdermal, ovarian failure symptoms treatment with estrogen and
        androgen combinations)
ΙT
     Pharmaceutical dosage forms
        (vaginal, ovarian failure symptoms treatment with estrogen and androgen
        combinations)
IT
     50-27-1, Estriol
                        50-28-2, Estradiol, biological studies
     Estradiol benzoate 53-16-7, Estrone, biological studies 53-39-4
      Oxandrolone
                   56-53-1, Diethylstilbestrol 57-63-6, Ethinyl estradiol
     57-85-2, Testosterone propionate 58-18-4, Methyltestosterone 58-19-5,
     Dromostanolone 58-20-8, Testosterone cypionate 58-22-0, Testosterone
     63-05-8, Androstenedione 72-33-3, Mestranol 152-43-2, Quinestrol
     313-06-4, Estradiol cypionate
                                   315-37-7, Testosterone enanthate
     360-70-3, Nandrolone decanoate 434-07-1, Oxymethalone
                            517-09-9, Equilenin
    Nandrolone
                 514-68-1
                                                  521-10-8, Methandriol
                                                              968-93-4,
     521-18-6, Dihydrotestosterone 965-90-2, Ethylestrenol
     Testolactone
                  979-32-8, Estradiol valerate
                                                  1240-04-6
                                                              7280-37-7,
     Piperazine estrone sulfate
                                10418-03-8, Stanozolol
                                                          15183-37-6, Estetrol
     17230-88-5, Danazol
                         27651-95-2, Equilenin sulfate
                                                          28014-46-2,
     Polyestradiol phosphate
                             147827-23-4, Pinestrol
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ovarian failure symptoms treatment with estrogen and androgen
        combinations)
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          11724 S E3
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L4
                E THERAPUTIC
L5
         190608 S E3-E8
L6
             41 S L2 AND L5
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E2
             1
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E3
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E4
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E5
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                   INJECTIONABLE/BI
E6
            13
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L8
             9 L7 AND L2
=> d 18 1-9
rs
     ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1992:188207 CAPLUS
DN
     116:188207
     The effects of an anabolic steroid (oxandrolone) on reproductive
ΤI
     development in the male rat
ΑU
     Grokett, Bernard H.; Ahmad, Nazir; Warren, Dwight W.
     Dep. Exercise Sci., Univ. South. California, Los Angeles, CA, 90033, USA
CS
SO
     Acta Endocrinologica (1992), 126(2), 173-8
     CODEN: ACENA7; ISSN: 0001-5598
DΤ
     Journal
LΑ
     English
L8
     ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS
     1991:254029 CAPLUS
AN
DN
     114:254029
ΤI
     Compositions useful as contraceptives in males
ΙN
     Cohen, Michael
PA
     Neth.
     PCT Int. Appl., 31 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
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English

PATENT NO.

KIND DATE

APPLICATION NO. DATE

FAN.CNT 1

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WO 1990-NL90
PΙ
     WO 9100095
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             ML, MR, NL, SE, SN, TD, TG
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                       Α
                             19921121
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                             19901228
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                             19930729
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                             19941007
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                                            JP 1990-510056
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                             19950803
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                       Α
                             19910109
                                            CN 1990-103286
                                                              19900627
     ZA 9005020
                                            ZA 1990-5020
                       Α
                             19910424
                                                              19900627
PRAI US 1989-371794
                             19890627
     WO 1990-NL90
                             19900626
     MARPAT 114:254029
OS
rs
     ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1990:93339 CAPLUS
DN
     112:93339
     Micellar liquid chromatography for rapid screening of illegal drugs in
ΤI
     sport
ΑU
     Berthod, A.; Asensio, J. M.; Laserna, J. J.
     Lab. Sci. Anal., Univ. Lyon I, Villeurbanne, 69622, Fr.
CS
SO
     Journal of Liquid Chromatography (1989), 12(13), 2621-34
     CODEN: JLCHD8; ISSN: 0148-3919
DT
     Journal
     English
LΑ
Г8
     ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1975:149768 CAPLUS
DN
     82:149768
ΤI
     Effects of glucocorticoid hormone on lipid and carbohydrate metabolism.
          Effect of glucocorticoid hormone on lipid metabolism
ΑU
     Kikuchi, Takahisa
CS
     Dep. Intern. Med., Okayama Univ., Okayama, Japan
SO
     Okayama Igakkai Zasshi (1974), 86(11-12), 553-65
     CODEN: OIZAAV; ISSN: 0030-1558
DT
     Journal
LΑ
     Japanese
rs
     ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
     1973:80474 CAPLUS
DN
     78:80474
TI
     Influence of catatoxic steroids upon acute and chronic aniline toxicity
ΑU
     Lefebvre, Francine; Szabo, Sandor
CS
     Inst. Med. Chir. Exp., Univ. Montreal, Montreal, QC, Can.
SO
     Journal de Physiologie (Paris, 1946-1992) (1972), 63(5), 611-16
     CODEN: JOPHAN; ISSN: 0021-7948
DT
     Journal
ĽΑ
     French
T.8
     ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
     1970:18865 CAPLUS
```

DN

72:18865

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ΤI
     Estrogenic and antiestrogenic activities of a number of steroids in
     behavioral estrus and vaginal smear assays in the ewe
     Lindsay, D. R.; Scaramuzzi, R. J.
ΑU
     Univ. Sydney, Sydney, Australia
CS
     Journal of Endocrinology (1969), 45(4), 549-55
SO
     CODEN: JOENAK; ISSN: 0022-0795
DT
     Journal
LA
     English
L8
     ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
     1966:440387 CAPLUS
DN
     65:40387
OREF 65:7576b-e
     Effects of androgens, estrogens, and corticoids on strontium kinetics in
ΑU
     Eisenberg, Eugene
     Univ. of California, San Francisco
     J. Clin. Endocrinol. Metab. (1966), 26(5), 566-72
DT
     Journal
    English
LΑ
^{18}
    ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
    1965:75874 CAPLUS
DN
    62:75874
OREF 62:13472g-h,13473a
     Effect of several anabolic steroids on sulfobromophthalein (BSP) retention
TI
     in rabbits
     Lennon, Harry D.
ΑU
     Steroids (1965), 5(3), 361-73
SO
DT
     Journal
LA
    English
L8
    ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS
     1962:449501 CAPLUS
AN
     57:49501
DN
OREF 57:9913f-i,9914a-h
     2 Oxasteroids. New class of biologically active compounds
     Pappo, Raphael; Jung, Christopher J.
     G. D. Searle & Co., Skokie, IL
SO
     Tetrahedron Letters (1962) 365-71
DT
     Journal
LA
     Unavailable
=> d 18 2 6-9 all
L8
     ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1991:254029 CAPLUS
DN
     114:254029
TI
     Compositions useful as contraceptives in males
IN
     Cohen, Michael
PA
     Neth.
SO
     PCT Int. Appl., 31 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    English
IC
     ICM A61K031-56
     ICS A61K031-565; A61K031-585; A61K031-57; A61K031-58
ICI
    A61K031-56, A61K031-40, A61K031-05; A61K031-565, A61K031-40, A61K031-05;
     A61K031-57, A61K031-40, A61K031-05, A61K031-565; A61K031-585, A61K031-40,
     A61K031-05, A61K031-565, A61K031-57
CC
     63-6 (Pharmaceuticals)
```

Section cross-reference(s): 2 FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE _____ _____ _____ WO 1990-NL90 PΙ WO 9100095 A1 19910110 19900626 W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG IN 171596 Α 19921121 IN 1990-MA495 19900620 CA 2059138 AA 19901228 CA 1990-2059138 19900626 AU 9059683 A1 19910117 AU 1990-59683 19900626 AU 639467 B2 19930729 DD 297327 A5 19920109 DD 1990-342103 19900626 EP 479867 A1 19920415 EP 1990-910521 19900626 EP 479867 B1 19960515 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE DD 299619 A5 19920430 DD 1990-344095 19900626 IL 94869 A1 19941007 IL 1990-94869 19900626 JP 07507037 T2 19950803 JP 1990-510056 19900626 E AT 1990-910521 AT 137970 19960615 19900626 CN 1048327 A CN 1990-103286 19910109 19900627 ZA 9005020 Α 19910424 ZA 1990-5020 19900627 PRAI US 1989-371794 19890627 WO 1990-NL90 19900626 OS MARPAT 114:254029 AΒ A method of effecting contraception in human males comprises administering a combination of melatonin and an androgenic hormone in a contraceptively effective amt. Optionally, the melatonin and androgenic hormone can be further combined with a progesterone or an estrogen. An administration of melatonin and androgens also provides as method for preventing prostate cancer. Thus, a 23 yr-old male was administered a depot injection of melatonin 100 and testosterone enanthate 200 mg on a weekly basis. The patient became azoospermic and contraceptive efficacy was achieved. The injections were continued to maintain azoospermia. STcontraceptive male melatonin androgen; progesterone melatonin androgen male contraceptive; estrogen melatonin androgen male contraceptive; prostate cancer prevention melatonin androgen ITAndrogens RL: BIOL (Biological study) (mixt. with melatonin, for male contraception) IT Testis, disease or disorder (azoospermia, induction by melatonin and androgens, for male contraception) IT Pharmaceutical dosage forms (implants, s.c., sustained-release, of melatonin and androgen, for male contraception) IT Pharmaceutical dosage forms (injections, of melatonin and androgen, for male contraception) IT Contraceptives (male, melatonin and androgen combination for) IT Estrogens Proqestogens RL: BIOL (Biological study) (mixts., with androgens and melatonin, for male contraception) IT Prostate gland (neoplasm, prevention of, melatonin and androgen combination for) ΙT Pharmaceutical dosage forms

(oral, of melatonin and androgen, in individual storage pods, for male

Norethindrone acetate, mixts. with melatonin and androgen 52-76-6D,

50-28-2D, Estradiol, mixts. with melatonin and androgen

contraception)

IT

Lynestrenol, mixts. with melatonin and androgen 53-16-7D, Estrone, mixts. with melatonin and androgen 56-53-1D, Diethylstilbestrol, mixts. with melatonin and androgen 57-63-6D, Ethinyl estradiol, mixts. with melatonin and androgen 67-95-8D, Quingestrone, mixts. with melatonin and androgen 68-22-4D, Norethindrone, mixts. with melatonin and androgen 68-23-5D, Norethynodrel, mixts. with melatonin and androgen 71-58-9D, Medroxyprogesterone acetate, mixts. with melatonin and androgen 72-33-3D, Mestranol, mixts. with melatonin and androgen Melatonin, analogs, mixts. with androgens and progestogens 79-64-1D. Dimethisterone, mixts. with melatonin and androgen 297-76-7D, Ethynodiol acetate, mixts. with melatonin and androgen 302-22-7D, Chlormadinone acetate, mixts. with melatonin and androgen 434-22-0D, 19-Nortestosterone, mixts. with melatonin and progestogen 481-97-0D, Estrone sulfate, mixts. with melatonin and androgen 595-33-5D, Megestrol acetate, mixts. with melatonin and androgen 797-63-7D, Levonorgestrel, mixts. with melatonin and androgen 1169-79-5D, Quinestradiol, mixts. with melatonin and androgen 6533-00-2D, Norgestrel, mixts. with melatonin and androgen 134061-43-1, Melatonin-testosterone mixt. 134061-44-2, Melatonin-testosterone propionate mixt. 134061-45-3, Melatonin-testosterone enanthate mixt. 134061-46-4, Melatonin-134061-47-5, Melatonin-methylestosterone testosterone cypionate mixt. 134061-48-6, Melatonin-fluoxymesterone mixt. 134061-49-7, $134061-50-\bar{0}$, Melatonin-methandriol mixt. Melatonin-danazol mixt. 134061-51-1, Melatonin-nandrolone decanoate mixt. 134061-52-2, Melatonin-nandrolone phenpropionate mixt. 134061-53-3, Melatonin-oxandrolone mixt. 134061-54-4, Melatonin-oxymetholone mixt. 134095-27-5, 134061-55-5, Melatonin-stanozolol mixt. Melatonin-testolactone mixt. 134095-28-6 134095-29-7 134095-45-7, Melatonin-dromostanolone propionate mixt. 134117-95-6, Melatonin-ethylestrenol mixt. RL: BIOL (Biological study) (male contraceptives contq., for azoospermia induction)

- L8 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
- AN 1970:18865 CAPLUS
- DN 72:18865
- TI Estrogenic and antiestrogenic activities of a number of steroids in behavioral estrus and vaginal smear assays in the ewe
- AU Lindsay, D. R.; Scaramuzzi, R. J.
- CS Univ. Sydney, Sydney, Australia
- SO Journal of Endocrinology (1969), 45(4), 549-55 CODEN: JOENAK; ISSN: 0022-0795
- DT Journal
- LA English
- CC 4 (Hormones and Related Substances)
- AΒ Fourteen synthetic steroids and androstenedione were examd. in ovariectomized ewes for estrogenic activity when administered alone and with estradiol benzoate by i.m. injection. None of the compds. investigated was active when administered alone, as assessed by the vaginal smear assay, and only androstenedione produced a behavioral response. Androstenedione had a min. effective dose of 8.8 mg but was less active when administered i.v. Several steroids acted as antiestrogens when injected with estradiol benzoate. Eight steroids inhibited the behavioral response and 4 the vaginal response. An additive response was found with androstenedione for behavioral response and with 17.beta.-ethyl-17-hydroxy-19-nor-4-androsten-3-one for vaginal response. Vaginal and behavioral responses were not necessarily related, and responses obtained in the ewe to particular steroids were not identical with those obtained in lab. animals by other workers using similar tests. ST
- ST steroids estrogenic; estrogenic steroids; behavior steroids; antiestrogenic steroids
- IT Estrogenic hormones

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RL: BIOL (Biological study)
        (and inhibitors, steroids as, assay techniques in relation to)
ΙT
        (estrogenic activity of steroids detn. by induction of behavioral,
        vaginal smear assay in relation to)
IT
        (estrogenic activity of steroids detn. by smear from, behavioral estrus
        in relation to)
     Steroids, biological studies
ΙT
     RL: BIOL (Biological study)
        (estrogenic and antiestrogenic activities of, in behavioral estrus and
        vaginal smear assays)
ΙT
     17913-39-2
     RL: BIOL (Biological study)
        (behavioral estrus and vaginal estrogen response inhibition by)
ΙT
     RL: BIOL (Biological study)
        (behavioral estrus and vaginal response inhibition by)
IT
     63-05-8
     RL: BIOL (Biological study)
        (behavioral estrus augmentation and vaginal estrogen response
        inhibition by)
IT
     64 - 82 - 4
               2061-45-2
                            2061-46-3
                                        26624-16-8
                                                      26624-17-9
     RL: BIOL (Biological study)
        (behavioral estrus inhibition by)
ΙT
     52-78-8
     RL: BIOL (Biological study)
        (vaginal estrogen response augmentation by)
IT
     26624-15-7
     RL: BIOL (Biological study)
        (vaginal estrogen response inhibition by)
L8
     ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
AN
     1966:440387 CAPLUS
     65:40387
DN
OREF 65:7576b-e
     Effects of androgens, estrogens, and corticoids on strontium kinetics in
     man
ΑU
     Eisenberg, Eugene
CS
     Univ. of California, San Francisco
SO
     J. Clin. Endocrinol. Metab. (1966), 26(5), 566-72
DT
     Journal
     English
LA
CC
     58 (Hormones)
     Kinetic studies were made in subjects after intravenous administration of
AΒ
     10 meq. Sr, before and during treatment with steroid hormones, to det. the
     effects of these agents on the bone deposition rate. Oral administration
     of fluoxymesterone, oxandrolone, oxymetholone, 7,17-dimethyltestosterone, and norethandrolone (10, 5, 7.5, 1.25, and 20 mg./day) or intravenous
     injection of testosterone enanthate, testosterone caprinoyl ace
     tate, or nandrolone phenopropionate (200, 200, and 50 mg., resp., every 2
     weeks) decreased the urinary excretion rate of Sr, when administered for 6
     weeks. Oral administration of conjugated equine estrogen,
     methallenestrol, ethynylestradiol, or 16.alpha.-methylestriol
     16.beta.,17.beta.-3-methyl ether (2.5, 9, 0.1, and 20 mg./day, resp.)
     similarly decreased the urinary excretion rate and also decreased Sr
     deposition in bone by .apprx.0.6 l. of miscible pool/24 hrs.; since these
     were all patients with postmenopausal osteoporosis, this represented
     .apprx.10% decrease in the bone Sr deposition rate. The androgens and
     estrogens therefore appear to be anticatabolic for bone, and estrogens may
     also be antianabolic. Oral administration of cortisol, prednisone,
     triamcinolone, 6.alpha.fluorotriamcinolone, dexamethasone, or
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6.alpha.-fluoroprednisolone (80-120, 20-30, 12-18, 24, 3, or 12 mg./day, resp.) did not decrease the bone deposition rate but did increase the urinary excretion rate of Sr; the corticoids therefore did not appear to be antianabolic for bone. The decrease in bone mass which eventually occurs following corticoid administration is probably the result of accelerated bone resorption. Correction of bone deposition rates of Sr for fecal excretion rates did not affect the results. The results did not show whether the changes in urinary excretion rates induced by both gonadal steroids or glucocorticoids were attributable to effects on the kidney, on bone, or on both. 38 references. Bones Urine (strontium in, effect of androgens, corticosteroids and estrogens on) Androgenic hormones or principles Corticosteroids Estrogenic hormones or principles (strontium metabolism response to) Testosterone, heptanoate, mixt. with testosterone propionate (strontium metabolism response to) 76-43-7, Androst-4-en-3-one, 9-fluoro-11.beta.,17.beta.-dihydroxy-17-434-07-1, 5.alpha.-Androstan-3-one, 17.beta.-hydroxy-2-(hydroxymethylene) -17-methyl-(in strontium metabolism) 7440-24-6, Strontium (metabolism of, effect of androgens, corticosteroids and estrogens on) 53-34-9, Pregna-1,4-diene-3,20-dione, 6.alpha.-fluoro-11.beta.,17,21trihydroxy-(prepn. of) 219-13-6, Cyclopenta[5,6]naphtho[1,2-c]pyran (steroid derivs., strontium metabolism response to) 50-02-2, Pregna-1,4-diene-3,20-dione, 9-fluoro-11.beta.,17,21-trihydroxy-16.alpha.-methyl- 50-23-7, Cortisol 53-03-2, Pregna-1,4-diene-3,11,20trione, 17,21-dihydroxy-124-94-7, Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11.beta.,16.alpha.,17,21-tetrahydroxy- 807-38-5, Pregna-1,4-diene-3,20-dione, 6.alpha.,9-difluoro-11.beta.,16.alpha.,17,21tetrahydroxy-(strontium in urine in response to) 52-78-8, 19-Nor-17.alpha.-pregn-4-en-3-one, 17-hydroxy- 53-39-4, 2-Oxa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-methyl-19-Nor-17.alpha.-pregna-1,3,5(10)-trien-20-yne-3,17-diol Estr-4-en-3-one, 17.beta.-hydroxy-, hydrocinnamate 517-18-0, 2-Naphthalenepropionic acid, .beta.-ethyl-6-methoxy-.alpha.,.alpha.dimethyl-5108-94-1, Estra-1,3,5(10)-triene-16.beta.,17.beta.-diol, 3-methoxy-16-methyl- 5874-98-6, Testosterone, 3-oxododecanoate 10350-44-4, Androst-4-en-3-one, 17.beta.-hydroxy-7,17-dimethyl-(strontium metabolism response to) ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS 1965:75874 CAPLUS 62:75874 OREF 62:13472g-h,13473a Effect of several anabolic steroids on sulfobromophthalein (BSP) retention in rabbits Lennon, Harry D. Steroids (1965), 5(3), 361-73 Journal English 58 (Hormones) Routine BSP retention tests were performed on fasted rabbits, blood samples being collected at 5-min. intervals beginning 20 min. after BSP injection. Blood samples were clotted and centrifuged at 3000 rpm. for 20 min. and the dye diln. detd. colorimetrically. Bile samples

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were obtained by cannulation of the bile duct. The steroids tested were given orally daily for 4 days, except for testosterone propionate (I), which was given intramuscularly. The initial disappearance rate of the dye from blood was 23.9%/min. at 20 mg./kg. The greatest BSP concn. in bile was at 20 min. after injection and the av. recovery after 2 hrs. was 82.1%, the major part being excreted during the 1st hr. 10 mg./kg., did not alter, whereas 1 mg. methyltestosterone (III)/kg. slightly increased, 10 mg./kg. caused a 5-fold increase, and 20 mg./kg. further increased BSP-retention in the serum. Norethandrolone (IV) also caused a dose-dependent increase in I-retention, but oxandrolone was much less effective than the III or IV, and failed to demonstrate a clear-cut dose relation. Liver (-function tests, steroid effect on) Bile (bromsulfophthalein in, steroid effect on) Androst-4-en-3-one, 17.beta.-hydroxy-17-methyl-(methyltestosterone) (sulfobromophthalein retention and) 53-39-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-(effect on sulfobromophthalein retention) 58-22-0, Testosterone (in sulfobromophthalein retention) 297-83-6, Phenolphthalein, 4,5,6,7-tetrabromo-3',3''-disulfo-(liver clearance of, anabolic steroid effect on) 316-26-7, Cyclopenta [5,6] naphtho [2,1-c] pyran (steroid derivs., effect on sulfobromophthalein retention) 52-78-8, 19-Nor-17.alpha.-pregn-4-en-3-one, 17-hydroxy-(sulfobromophthalein retention response to) ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS 1962:449501 CAPLUS 57:49501 OREF 57:9913f-i,9914a-h 2 Oxasteroids. New class of biologically active compounds Pappo, Raphael; Jung, Christopher J. G. D. Searle & Co., Skokie, IL Tetrahedron Letters (1962) 365-71 Journal Unavailable 36 (Steroids) For diagram(s), see printed CA Issue. cf. CA 51, 4330c. Treatment of 1 androstene3,17 dione 16 hrs. at 20.degree. with 4 equivs. Pb(OAc)4 in 905% aq. AcOH and the seco aldehyde reduced with aq. NaBH4 followed by acid treatment yielded 50-60% 17.beta.-hydroxy-2-oxa-3-androstanone (I, R = OH, H) (II), m. 198-203.degree., .lambda. 2.75, 5.78 .mu., [.alpha.]24D 1.0.degree., oxidized with CrO3 to I (R = 0), m. 174-5.degree., .lambda. 5.77 .mu.. Similar treatment of 17.beta.-hydroxy-17.alpha.-methyl-1-androsten-3 one (III) led to the corresponding 17.beta.-hydroxy-1-oxo-1,2-seco-A-nor-17.alpha.-methylandrostane-2-carboxylic acid, m. 166-73.degree. (decompn.), 2.77, 2.85, 3.70, 5.80 .mu., [.alpha.]25D -22.5.degree., also obtained by Pb(OAc)4 cleavage of 1.alpha., 2.alpha., 17.beta.-trihydroxy-17.alpha.-methyl-3androstanone, m. 180-8.degree. (decompn.), .lambda. 2.80, 2.89, 5.81 .mu., [.alpha.]26D 15.degree., prepd. by hydroxylation of III with KClO3 in the presence of catalytic amts. of OsO4 in aq. Me3COH. The aldehyde acid reduced with NaBH4 gave 1 (R = OH, Me) (IV), m. 235-8.degree., .lambda. 2.87, 5.79 .mu., [.alpha.]25D -23.degree.. Synthesis of the analogous 4,5-unsatd. compds. proved to be considerably more difficult. Treatment of 1,4-androstadiene-3,17-dione in Me3COH with KClO3 in the presence of OsO4 gave mainly V (R = O), m. 205-9.degree., .lambda. 228 m.mu. (.epsilon. 9500, MeOH), .lambda. 2.80, 2.88, 5.76, 5.93

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.mu., [.alpha.] 28D 151.degree.. The mother liquors fractionally crystd. yielded 10% 1.alpha., 2.alpha.-dihydroxy-4-androstene-3,17-dione (VI, R = |O), |m. 205-9.degree., .lambda. 238 m.mu. (.epsilon. 13,700), .lambda. 2.80, 2.87, 5.75, 5.95, 6.19 .mu., [.alpha.]27D 168.5.degree.. The ketone cleaved with Pb(OAc)4 in aq. AcOH at about 60.degree. gave VII (R = O) (VIII), m. 250-9.degree., .lambda. 226 m.mu. (.epsilon. 14,000), .lambda. 2.80, 3.00, 5.78, 5.88, 6.12 .mu., [.alpha.]27D 279.5.degree. (existing mainly in the lactol form, 1-hydroxy-2oxa-4-androstene-3,17-dione). VIII in CHCl3 stirred with 1 equiv. NaOH in the presence of excess NaBH4 gave pure 17.beta.-hydroxy-2-oxa-4-androsten-3-one (IX, R = .beta.-OH, H) (X), m. 205-7.degree., .lambda. 223.5 m.mu. (.epsilon. 14,500), .lambda. 2.76, 5.80, 5.88, 6.14 .mu., [.alpha.]28D 173.degree.. Similar treatment of 17.beta.-hydroxy-17.alpha.-methyl-1,4-androstadien-3-one gave predomi-nantly V (R = .beta.-OH, Me) (XI), m. 196-9.degree., .lambda. 229.5 m.mu. (.epsilon. 9350), .lambda. 281, 2.89, 5.93, 6.20 .mu., [.alpha.]26D 57.5.degree.. Fractional crystn. of the mother liquors and removal of residual XI with aq. NaHSO3 in C5H5N gave the required isomeric VI (R = .beta.-OH, Me) (XII), m. 1993.0-5.5.degree., .lambda. 239 m.mu., (.epsilon. 13,300), .lambda. 2.85, 3.00, 5.90, 5.96, 6.1 .mu. (KBr), [.alpha.]27D 63.degree.. XI and XII separately treated with Pb(OAc)4 in AcOH gave 17.beta.hydroxy-3,5-seco-5-oxo-17.alpha.-methyl-A-nor-1androstene3-carboxylic acid (lactol form, 5,17.beta.-dihydroxy-17.alpha.methyl-4-oxa-1-androsten-3-one) (XIII), m. 227-30.degree., .lambda. 220 m.mu. (.epsilon. 7500), .lambda. 3.00, 3.15, 5.93, 6.18 .mu., and the lactol VII (R = .beta.-OH, Me) (XIV), m. 250-65.degree., .lambda. 226 m.mu. (.epsilon. 14,200), .lambda. 2.85, 3.05, 5.85, 6.13 .mu. (KBr). Treatment of XIII and XIV in CHCl3 with dil. aq. K2CO3 or Na2CO3 extd. XIII selectively since XIV was only sol. in dil. NaOH. Reduction of XIV in CHCl3 gave 17.beta.-hydroxy-17.alpha.-methyl-2-oxa-4-androsten-3one, (XV), m. 230-40.degree. (decompn.), .lambda. 223.5 m.mu. (.epsilon. 12,500), .lambda. 2.75, 5.78, 5.85, 6.13 .mu., [.alpha.]26D 123.degree.. Application of the same series of reactions to .DELTA.1-progesterone gave a mixt. of 1,2-dihydroxyprogesterone and 4,5-dihydroxy-1-pregnene3,20dione, converted by treatment with Pb(OAc)4 to a mixt. of VII (R = .beta.-Ac, H) (XVI) and 5-hydroxy-4-oxa-1pregnene-3,20-dione (XVII), sepd. by partition with aq. K2CO3 to give pure XVI, m. 220-3.degree., .lambda. 226.5 m.mu. (.epsilon. 14,300), .lambda. 2.80, 3.00, 5.79, 5.88, 6.12 .mu., [.alpha.]26D 268.degree. (0.5%) and pure XVII, m. 203-6.degree., .lambda. 220 m.mu. (.epsilon. 8300), .lambda. 2.80, 2.97, 5.80, 5.87 .mu., [.alpha.]28D 275.5.degree.. XVI reduced with NaBH4 in a 2 phase system and the epimeric 20-hydroxy compds. oxidized with CrO3 gave IX (R = .beta.-Ac, H) (XVII), m. 168-9.degree., .lambda. 223.9 m.mu. (.epsilon. 14,150), .lambda. 5.80, 5.85, 6.13 .mu., [.alpha.] 26D 237.5.degree.. An analogous series of reactions converted 17.alpha.-acetoxy-.DELTA.1progesterone to 17.alpha.-acetoxy-1-hydroxy-2-oxaprogesterone VII (R = .beta.-Ac, OAc), m. 285.8.degree. (decompn.), .lambda. 226 m.mu. (.epsilon. 14,400), .lambda. 2.75, 2.98, 5.76, 6.10, 7.90 .mu., [.alpha.]24D 137.degree., reduced by NaBH4 in Me2CHOH to give IX (R =.beta.-Ac, OAc) (XVIII), m. 275-9.degree., .lambda. 223.5 m.mu. (.epsilon. 14,900), .lambda. 5.80, 5.83, 6.15, 7.97 .mu., [.alpha.]23D 114.5.degree.. XV is about as anabolic as 17.alpha.-methyltestosterone but only 20% as androgenic by intramuscular injection in the levator ani test. IV was more active than 17.beta.-hydroxy-17.alpha.-methyl-3-androstanone as an oral anabolic agent in the N retention test but is essentially devoid by androgenic properties. XVII and XVIII are about as active as progesterone and 17-acetoxy progesterone resp. in rabbits in the Clauberg assay. The biol. equivalence of the 2-oxa corticoids to the corresponding normal steroids is not compatible with the considerable chem. difference between lactones and ketones and it was assumed that the 3-CO group is not involved chemically in the mechanism of biol. action of these hormones. Spectra, infrared

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Spectra, visible and ultraviolet
IT
        (of 4.alpha.,5-dihydroxy-5.alpha.-androst-1-ene-3,17-dione and
        congeners)
     95126-10-6, 2-Oxaandrost-4-ene-3,17-dione, 1-hydroxy-
ΙT
        (equil. with 1,17-dioxo-1,2-seco-A-norandrost-3(5)-en-2-oic acid)
     98658-79-8, 7H-Benz[e]indene-.DELTA.7,.alpha.-acetic acid,
IT
     6-formyl-1,2,3,3a,4,5,5a,6,8,9,9a,9b-dodecahydro-3a,6-dimethyl-3-oxo-
     98843-08-4, 1,2-Seco-A-norandrost-3(5)-en-2-oic acid, 1,17-dioxo-
        (in equil. with 1-hydroxy-2-oxaandrost-4-ene-3,17-dione)
     104831-96-1, 4-Oxaandrost-1-en-3-one, 5,17.beta.-dihydroxy-17-methyl-
IT
        (in equil. with 17.beta.-hydroxy-17-methyl-5-oxo-3,5-seco-A-norandrost-
        1-en-3-oic acid)
     100150-69-4, 1H-Benz[e]indene-6-acrylic acid, 2,3,3a,4,5,5a,6,7,8,9,9a,9b-
IT
     dodecahydro-3-hydroxy-3,3a,6-trimethyl-7-oxo- 105564-76-9,
     3,5-Seco-A-norandrost-1-en-3-oic acid, 17.beta.-hydroxy-17-methyl-5-oxo-
        (in equil. with 5,17.beta.-dihydroxy-17-methyl-4-oxaandrost-1-en-3-one)
IT
     53-39-4, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-17-
              794-12-7, 2-0xa-5.alpha.-androstan-3-one, 17.beta.-hydroxy-
     901-87-1, 1,2-Seco-A-nor-5.alpha.-androstan-2-oic acid,
     17.beta.-hydroxy-17-methyl-1-oxo-
                                          1805-13-6, 5.alpha.-Androst-1-ene-3,17-
     dione, 4.alpha.,5-dihydroxy- 26609-24-5, 2-Oxapregn-4-ene-3,20-dione
     38851-97-7, 2-Oxaandrost-4-en-3-one, 1,17.beta.-dihydroxy-17-methyl-
     63973-71-7, 2-Oxaandrost-4-en-3-one, 17.beta.-hydroxy-
                                                                92473-02-4,
     2-Oxaandrost-4-en-3-one, 17.beta.-hydroxy-17-methyl-
                                                            94003-59-5,
     2-0xa-5.alpha.-androstane-3,17-dione 94761-20-3, 5.alpha.-Androstan-3-
     one, 1.alpha., 2.alpha., 17.beta.-trihydroxy-17-methyl-
                                                               95172-05-7,
     2-Oxapregn-4-ene-3,20-dione, 17-hydroxy-, acetate 95585-10-7, 5.alpha.-Androst-1-en-3-one, 4.alpha.,5,17.beta.-trihydroxy-17-methyl-
     95720-13-1, Androst-4-ene-3,17-dione, 1.alpha.,2.alpha.-dihydroxy-
     95946-65-9, 2-Oxapregn-4-ene-3,20-dione, 1-hydroxy-
                                                             96002-84-5,
     2-Oxapregn-4-ene-3,20-dione, 1,17-dihydroxy-, 17-acetate
                                                                  96478-50-1,
     Androst-4-en-3-one, 1.alpha., 2.alpha., 17.beta.-trihydroxy-17-methyl-
     99729-06-3, 1H-Benz[e]indene-7-acetic acid, 6-formyldodecahydro-3-hydroxy-
                         100194-71-6, 4-Oxapregn-1-ene-3,20-dione, 5-hydroxy-
     3,3a,6-trimethyl-
        (prepn. of)
ΙT
     219-13-6, Cyclopenta[5,6]naphtho[1,2-c]pyran
                                                      219-18-1,
     Cyclopenta[5,6]naphtho[2,1-b]pyran
        (steroid derivs.)
=> d his
     (FILE 'HOME' ENTERED AT 13:01:20 ON 03 APR 2003)
     FILE 'REGISTRY' ENTERED AT 13:01:28 ON 03 APR 2003
T.1
              8 S OXANDROLONE
     FILE 'CAPLUS' ENTERED AT 13:02:16 ON 03 APR 2003
L2
            239 S L1
                E DERMAL
L3
          11724 S E3
L4
              0 S L3 AND L2
                E THERAPUTIC
L5
         190608 S E3-E8
L6
             41 S L2 AND L5
                E INJECTION
L7
         410596 S E3
L8
              9 S L7 AND L2
=>
```

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|--|---------------------|------------------|
| FULL ESTIMATED COST | 141.55 | 148.06 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| CA SUBSCRIBER PRICE | ENTRY -8.46 | SESSION -8.46 |

STN INTERNATIONAL LOGOFF AT 13:32:21 ON 03 APR 2003